OHIO STATE UNIVERSITY
DEC 6 1927
LIBRARY

TX1
P89
v.6

The Home Economist

Formerly Food and Health Education

ANNA BARROWS

NOVEMBER, 1927

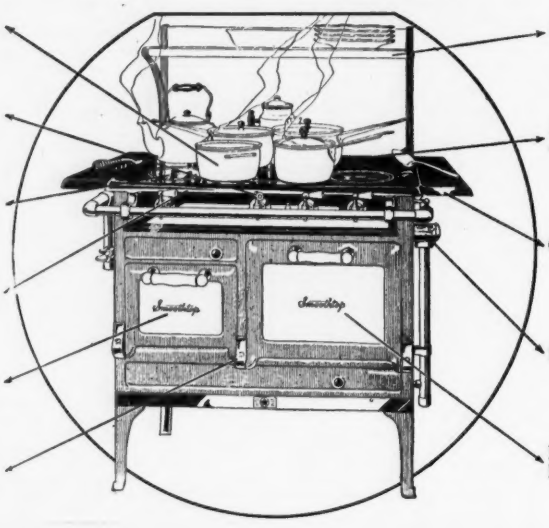
Anna Barrows
Mary M. Buckley
Clara W. Hasslock
Florence Allen McMahon
Grace R. Finucane
Frances D. Radford

Smoothtop

REG. U.S. PAT. OFF.

GAS RANGE

A BETTER WAY TO COOK


5 kettles can cook on 1 burner
Pilot light . . . . . .
3 heats—boil, simmer, warm
Convenient height—38" from floor
Well-designed separate broiler
Strong hinged oven doors act as loading shelves
Wide warming shelf
All of Smoothtop is cooking surface
Cooking chart . . . . .
Standard heat control
Even heat throughout large oven

Four cooking heats from one burner

INSTALL SMOOTHTOP

THOSE anxious last few minutes before dinner! Vegetables just finishing, gravy and sauces to be made at low heat, quick sauteing to be done, coffee to be put on, plates to be warmed . . . you could use twice the burners that an ordinary gas stove provides you!

With Smoothtop, there is no haste, no confusion of putting kettles off and back on burners, no anxious watching and stirring. Every square inch is cooking surface, and from a single burner you can get every degree of heat at once.

In addition to ease of handling, Smoothtop does better cooking . . . gives smoother textures, more delicate flavors through slow simmering. There is no kettle-tipping, grease-popping, burner-clogging.

Its oven is hot all over. It has heat control, cooking chart, wide warming shelf, pilot light, separate broiler, all modern accessories.

It is handsomely designed in gray and white enamel, and scientifically built to get maximum combustion.

Smoothtop is tested and approved by Good Housekeeping Institute, Tribune Institute, Home Owners' Service Institute, Delineator, Modern Priscilla, and leading domestic science experts. It is installed in scientifically equipped kitchens, modern hotels, progressive economics courses.

Put Smoothtop to work in your classroom. The gas company will demonstrate it to you. Or write for booklet showing our special domestic science model OD 1450. Address the

STANDARD GAS EQUIPMENT CORPORATION

18 EAST 41st STREET NEW YORK

Pacific Coast Distributor: Northwest Gas and El. Equip. Co., Portland, Ore., San Francisco, Los Angeles

STANDARD GAS EQUIPMENT CORPORATION

THE HOME ECONOMIST

Editor: WINIFRED STUART GIBBS
Assistant Editor: JESSIE A. KNOX

ADVISERS: Nutrition—DR. HENRY C. SHERMAN, Columbia University; DR. MARY SWARTZ ROSE, Teachers College, Columbia University; LUCY H. GILLETT, New York Association for improving the Condition of the Poor. Public School Supervision—MARTHA WESTFALL, Director of Home Making, Public Schools, New York City. Textile and Clothing—ELLEN B. McGOWAN, Teachers College, Columbia University.

IN THIS NUMBER

The Story of Grape Juice ..... C. H. GAGER

The Story of Textiles ..... WARREN P. SEEM

The Supervised Lunch ..... MABEL MURRAY

Nutrition and Health Education ..... ISABELLA CHILTON WILSON

Nutrition Work in the Elementary Grades ..... IVOE SPAFFORD

CONTENTS *of This Issue*—NOVEMBER, 1927

Cover Portrait—Anna Barrows.

Chapters from the Lives of Leaders—Practical Education the Need of the Ultimate Home Economist—By Anna Barrows 179

The Story of Food and Food Products—The Story of Grape Juice—By C. H. Gager 181

The Story of Textiles—The Story of Coarse and Fine Threads—By Warren P. Seem 183

Nutrition and Health Education—By Isabella Chilton Wilson 185

Pageant of the Home—By Mary M. Buckley 186

Impressions of Camps in Several Southern States—By Clara W. Hasslock 188

Editorial—Organizing for Health 189

The Supervised Lunch—By Mabel Murray 191

Housekeepers, Amoassadors of Peace—By Florence Allen McMahon 192

The School Banquet—By Frances D. Radford and Grace R. Finucane 194

Pamphlets Received 196

Nutrition Work in the Elementary Grades—By Ivoe Spafford 198

Published monthly by THE AMERICAN FOOD JOURNAL, Inc., Floral Park, N. Y. Entered as second-class matter December 31, 1923, at the Post Office at Floral Park, N. Y., under the Act of March 3, 1879. Copyright, 1927 by THE AMERICAN FOOD JOURNAL, Inc. All rights reserved. Publication Office, Floral Park, New York; Business and Editorial Offices, 468 Fourth Avenue, New York City.

Vol. V, No. 11 **10c a copy** **$1.00 a year**

A Hundred Years Ago

WHEN "milkmaids" were celebrated in romantic song and story—a hundred years ago—many thousands of babies and children died every year because so little was then known about milk.

The importance of milk in the diet was not then known. They didn't know the harm to health that unclean milk might do. They were not able to get milk that was surely clean and wholesome.

We now know. To-day we know how to be sure that the milk we use is absolutely safe and wholesome. And it can be had everywhere. Evaporated Milk, sterilized in sealed containers, is the last step in the long struggle for an absolutely safe and wholesome milk supply for everybody, at every place, in every season.

Evaporated Milk is not a substitute for milk. It *is* milk—and it is *better* milk—it is richer and safer than any other milk. The pure milk from the best dairy pastures and farms of America is concentrated—sixty percent of the water removed. That makes it more than twice as rich as ordinary milk, not only in butterfat but in all the food substances of milk. It is homogenized, and sterilized in sealed containers—protected from everything that could impair its freshness and richness and purity.

Where the best of milk is needed Evaporated Milk fills the need. For those who are ill, it is particularly useful.

Because it is concentrated, Evaporated Milk can be used to great advantage for those who need food of high nourishing value and of small bulk. Physicians have discovered that premature infants will take and thrive upon Evaporated Milk undiluted—proof at once of its ready digestibility and of its usefulness where high caloric foods are needed.

The Homogenization and the Sterilization make Evaporated Milk more readily digestible than is ordinary milk.

Cows' milk is designed for the stomach of a calf. The large fat globules, and the hard curds that form in the course of digestion of ordinary milk, often cause trouble to human digestion. Evaporated Milk absolutely removes this trouble. The homogenization makes the fat globules as small as in human milk—readily assimilable by infants or invalids. The sterilization causes the curds to become soft and flocculent. Food made with Evaporated Milk accomplishes the important result of protecting weakened digestive powers.

To tempt the ailing appetite. Because of the pure freshness which the sterilization in the sealed container assures, and because of the smooth, extra richness which the concentration and sterilization guarantee, food can be prepared with Evaporated Milk which is particularly tempting to the appetite. In soups and custards, and in ice cream, the fine rich flavor is particularly noticeable. Because of the quality of Evaporated Milk, it can be blended with fruit juices in drinks that are vastly more appealing to the appetite than milk alone.

Let us send you our booklets "The Patient and the Diet" and "Tested Recipes" containing quantity recipes and other free booklets demonstrating the adaptability of Evaporated Milk to every cream and milk use. *Grocers everywhere have this up-to-date cream and milk supply.*

Eighty-seven and one-half per cent. of cows' milk is water. . . Twelve and one-half per cent. is butterfat, milk sugar, proteins and mineral salts (solids).

In ordinary milk the butterfat (cream) begins to separate as soon as the milk comes from the cow.

In making Evaporated Milk sixty per cent. of the water is removed. . . Therefore every drop contains more than twice as much cream and other food substances.

It is never skimmed milk . . . the butterfat never separates . . . the cream is kept in the milk.

ONLY WATER IS REMOVED — NOTHING IS ADDED

EVAPORATED MILK ASSOCIATION 231 SO. LASALLE ST. CHICAGO ILLINOIS

THE HOME ECONOMIST

Chapters from the Lives of Leaders

The Ultimate Home Economist and Her Need for Practical Education

By ANNA BARROWS

Lecturer, Teachers College, Columbia Unitversity

EDITOR'S NOTE:—When we conceived the idea for the series "Chapters from the Lives of Leaders," the underlying thought centered round the wish to give to home economics women of today something of the inspiration, the thrill that attaches to personal contact with those who have made home economics a living force. Mrs. Richards was so obviously "the one" for the opening chapter that THE HOME ECONOMIST printed an all too brief comment on Caroline L. Hunt's "Life". Of the living women who will contribute to the series, Anna Barrows is a fitting first—as a pioneer in the field she has had an unusual opportunity for watching and helping the development of the home economics movement as a whole. In extending our invitation we gave these leaders the choice of writing on one of two topics, their own personal experience in entering the home economics field, or facts about the development of home economics as a whole. Miss Barrows has elected to follow both our suggested plans because of the fact that when she writes of the home economics movement as a whole, she is automatically offering a page from her own experiences! There is a challenge in Miss Barrows' article. Read it and decide wherein lies our responsibility to our chosen work. THE HOME ECONOMIST, for one, is ready to express its own conviction that in the student club movement lies the true hope for vitalizing home economics. When Miss Barrows says: "I am convinced that we are not yet doing enough for those who would enjoy cookery as an avocation."—it is for both educators and students to think!

THE ultimate home economist is the woman in the individual home. A century ago her training was gained by working with her mother or some older woman either in the home or in the convent schools where the nuns taugt fine needlework and cookery for the sick to the young women placed in their charge.

Just when the first attempt was made to teach household arts in schools is uncertain, but a cookbook written by a Mrs. McIver o Edinboro, Scotland, and published before 1800 mentions the fact that she taught classes in cookery.

A school paper published in July, 1859, by the Freehold, N. J., Young Ladies Seminary, devoted nearly a fourth of its first page to an essay on "Domestic Science". Much of it might have been written in this century; here are two sentences: "Nothing is introduced in the culinary department but the modern inventions, and those too on the labor-saving principle." "A still larger class are those who regard the theory as excellent, but they do not wish to enter into the practice. They have studied Natural Philosophy, Chemistry, and all the kindred sciences but they have no idea of making their knowledge practical; they do not wish yet to Jescend from their flights of fancy to the sober prose of making a pie, or cooking a beefsteak."

Emma Willard and Catherine Beecher were firm believers in such training for the girls in their schools. Another step forward was taken when the English schools of cookery were started, to be followed soon after by our Boston Cooking School.

BECAUSE cookery was still highly esteemed only as an accomplishment for women, such special schools as these, in order to secure financial support, must offer instruction in the least known foods. Few women needed lessons in making soups, breads, or pastries, but they would pay to learn something about salads, fancy frostings, or to see such a wonder as baked ice cream. That period was fortunate in having for its leaders women like Juliet Corson, Mary J. Lincoln, Maria Parloa and others who managed to teach the fundamental principles of all good cookery with enough of the elaborate to attract attention and patronage.

Next came the introduction of cookery into the public schools, which, creating the need of special training for teachers of household arts, resulted in the establishment of such departments in many colleges and schools. The Lake Placid Conference started in 1899 by Mrs. Dewey and Mrs. Richards was the first effort at classification. At this original conference seven points were suggested for discussion which will be seen to outline everything included in a modern program:

- A classification of household economics.
- Additions to bibliographies already printed, with annotations.
- Provisions for the education of young women to be fitted by the best training for higher leadership.
- A compilation of the experience in teaching this subject in schools here and abroad.
- The founding of state schools or chairs in our state universities.
- The discussion of technical details in the conduct of the home which may lead to some agreement on definite and approved methods.
- Preparation of papers to be published and distributed, as the bulletins through the Department of Agriculture.

THIS conference became an annual affair and after ten years the work expanded and grew into what it is today—The American Home Economics Association. Now nearly thirty years later, we find that some of these things have been accomplished, yet many are hardly touched.

The Great War was an epoch making factor in home economics and gave a tremendous impetus to the agricultural work of the Department at Washington. A few months before war was declared in 1914 the passage of the Smith-Lever bill provided for the establishment of farm bureaus and the appointment of many more county agents of home economics. The Smith-Hughes bill coming later gave similar opportunities to the larger towns. During the war period splendid beginnings were made for extension work in thrift, the basis of true home economics work;

these, however, have not been followed up since the Armistice.

THE war was also partly responsible for turning our attention to the investigation of nutrition problems, and the habit once acquired we began researching everything in the past and present history of foods. (Our first acquaintance with the vitamin group came at this time and has proved an absorbing subject.) So far as research makes us realize the value of the accurate studies of careful scientists, it is worthwhile. We need more McCollums and Shermans, and still more the Slossons who can give the rank and file of public school teachers the gist of real discoveries in usable form. Professor James Harvey Robinson in his little book on "The Humanizing of Knowledge," makes a plea for rehumanizing the results of research so that they can be of interest to the public. "We need a new class of writers and teachers," says Professor Robinson. "They should undertake the conscious adventure of humanizing knowledge. They should be reassorters, combiners and illuminators. They should have a passion for diffusing, by divesting knowledge as far as possible of its contracted and professional character."

Mrs. Richards was helpful to all types of women because she believed in this diffusion of knowledge. She knew home life through long experience in country and city. One of her regrets was that much useful knowledge was lying on shelves in college theses, useless for diffusion.

We must take care also that in our zeal for research we do not lose sight of the main issue. What one of the famous Mayo doctors of Rochester, Minn., is quoted as saying of the medical profession is quite as true of the teaching of many phases of home economics today, it "is sick from too much research that might or might not cure generations yet unborn, with the result that the profession is getting too haughty to be passionately interested in treating a living sick man." Today home economics has a trend away from active life to a laboratory-monastic existence, studying minute details instead of helping people to live more comfortably together. There is some danger that we will find ourselves in the position of Henry Adams whose story of his own education has received so much attention—"he never got to the point of playing the game at all—he lost himself in the study of it, watching the errors of the players."

We would do well to remember that Mrs. Richards once said "The sanitary research worker in laboratories and field has gone nearly to the limit of his value. He will soon be smothered in his own work if no one takes it." It was her belief that we must reach toward people and meet them halfway. She would have little patience with the supersaturated scientists who feel that "Housekeeping does something to one," and therefore the true teacher of home economics must not keep house.

Some years ago a teacher of literature referring to a gathering of workers in home economics lines, compared their ardor to the zeal of those who had found a new religion, and must tell others. Certainly much of that enthusiasm is gone, but whether it is due to the loss of Mrs. Richards, or to the necessary red tape of larger bodies is hard to determine.

Formal courses of study, constitutions and creeds too often squeeze the life out of organizations. Apathy seems to be stealing over our subject similar to that which has hampered churches and other long established lines of education. Within a few weeks a bright young newspaper woman has said that "the dullness of orthodox home economics threatens to dissipate the few remaining vestiges of fine early American cookery."

ONE of the most successful women in lunchroom work told me some years ago that she did not want graduates of cookery schools in her employ, as they were seldom open minded and wanted her to conform to what they had been taught at school, even to the following of minute details in flavors in a recipe, while she was seeking originality. The trouble with many of the young women I have watched in classes during the past twenty years in demonstration cookery is that they are like musicians who would perform in public without previous practice. They cannot cook. They have acquired a rather critical attitude towards the housekeeper without knowledge of the conditions of life in most homes. As a part of the training of teachers of cookery and housekeeping there should be required some of the same hand to hand contact with actual problems that the nurse has to meet in her training. No smattering of nutrition, or complete system of budgeting will take the place of actual home life without other help than one's own hands and ordinary implements.

We seem to be losing the cooking instinct, just as the sense of smell is less keen in civilized man. Standardized products and machine made foods become monotonous and unpalatable as the personal touch is lost. From other parts of the world come reports that cookery is deteriorating. Yet food production, storage and transmission have all developed amazingly during the last half century.

Cookery lessons have discouraged cookery by too great an insistence on recipes and measurement. Cookery is aided by measures of material, temperature and time, but these are merely the skeleton on which the art of cookery builds attractive food. It is that type of orthodoxy which deters many from trying their hand at this first of human arts. The statement made by a prominent social worker and writer that "any one who can measure flour in a cup, and watch the clock can cook" is not true. Ruskin's familiar definition is nearer right. No wonder there are protests like Mrs. Lee's "If You Must Cook"! Cookery is more than measuring. There are many light touches which cannot be put into a paper pattern, and no piece of music can carry along the ability to interpret it. Yet that is expected of a recipe. The controllable conditions of the school laboratories make young teachers impatient with climate and weather which must be reckoned with elsewhere.

Visual education may be one way of solving the problem. Schools of all grades have found this an effective method of presenting national customs and ideals in geography, history and modern language lessons. A picture or a story often teaches more than concise charts or tables or even "graphs" which do not reach all minds without much explanation. In cookery the demonstration lecture with emphasis placed on materials and utensils as well as the "showing how to do it" offers an effective means of conveying interest and knowledge. Perhaps it would have been more popular in educational circles if our teachers could really cook. Lecture demonstrations too often ignore the actual manipulation of tools and ingredients. No lesson of this type is complete without due reference to the effect of the special food under consideration upon the human body. Nor is a nutrition lecture as useful as it might be if all cookery processes are omitted.

WHETHER radio can ever be as helpful as the well planned and executed demonstration lecture in presenting the details of housekeeping is still a question we may not be able to answer until television makes it possible to describe and show the processes at the same time.

Movies are too rapid, even if run slowly, to make details clear enough for the onlooker to repeat the process. It is another matter to show the steps in the manufacture of chocolate or the way in which a tropical fruit grows and is marketed. The few movies that I have seen of actual cookery were less helpful than most of the pictures of finished dishes shown in the women's magazines. There, however, the tendency is to show a pretty dish rather than the actual process. An editor friend once returned to me some photos on which I had spent much time and thought with the comment that they were "too realistic".

Perhaps the way will be to teach camp cookery throughout the land at the sites established by many towns for the auto tourists. Otherwise, the "hot dog" and the contents of the tin can are likely to become our national foods.

Hundreds of children during the first quarter of this century have had lessons in cookery and other household arts, and that during the period of life considered most effective in forming useful habit. Yet it is probable that hundreds of more families now depend on

(Continued on page 200)

The morning glass of grape juice has many advocates. Its flavor acts as an appetite stimulant and its mineral content helps to tone up the system

The Story of Food and Food Products

Supplementary Reading for Food Study Classes in Schools

The Story of Grape Juice

By C. H. GAGER

The Welch Grape Juice Company, Westfield, New York.

IN the time of man, probably no other fruit has received the mention which the grape has had in literature and folk-lore. Intertwined with the incidents of our ancient world it has come to us with all of its fascination and beauty—reaching and stretching forth its tiny tendrils of interest into the minds of all.

One reason we may find for the popularity of the grape is the natural interest aroused by the graceful appearance of the clusters while hanging on the vine. The rich coloring under soft velvety bloom of ripeness meets the eye with an appealing welcome that seems to say—"Come, break my delicate stem." So it has been for thousands of years that this earliest of known cultivated fruits has beckoned us with its beauty. The ancient Egyptians, Phoenicians, Greeks, and Romans, grew the vine and liked the refreshment it gave—some, so history tells us "not wisely, but too well".

Grape juice, lemons and mint make the prohibition mint julep — one that offers refreshment and has actual nutritive value as well

The woman who entertains will find many uses for grape juice—as a beverage it lends itself to all occasions

The story of the growth of the grape juice industry in our country from early years to the present day is one filled with idealism, romance and achievement; a tale of industry that stands out among others with stellar brightness. Primarily it was the brainchild of a splendid old man, Dr. T. B. Welch, who had been invested with the duty of supplying his little church with wine for the Sacrament. His conscience dictated that alcoholic wines should not be served to communicants, so when he accepted his stewardship, he did it with a very deep conviction that he would prepare an unfermented wine.

Louis Pasteur had at that time recently given widespread comment on his experiments in the destruction of bacteria and it was his gift that made possible this early start, for when the grape season came in the fall of 1869, Dr. Welch, with the help of his son, Dr. C. E. Welch, pressed enough juice for the first dozen bottles in the family kitchen.

Fifty-eight years have passed since then and looking backward, what a marvelous period of work and sacrifice it has been. Dr. T. B. Welch saw only a limited field among the churches for his unfermented grape juice but his son caught a vision in which he saw his product in the far corners of the earth, where the passing of the Eastern sun would let its fading light beam anew on the product in the West. What a vision it was—this popular use of his product; what glorious fun he realized in making it a reality, and what trials were born without stint of time or effort. Today Dr. C. E. Welch's sons are carrying on the work started so long ago, and the third generation has developed its sale to a point where five great plants annually store millions of gallons, only the choicest of Concord grapes are used and the juice is transferred so quickly from the cluster into glass bottles that none of the food values are lost or destroyed; nothing is added to it or taken away from it; you find it in all the refreshment of fresh fruit.

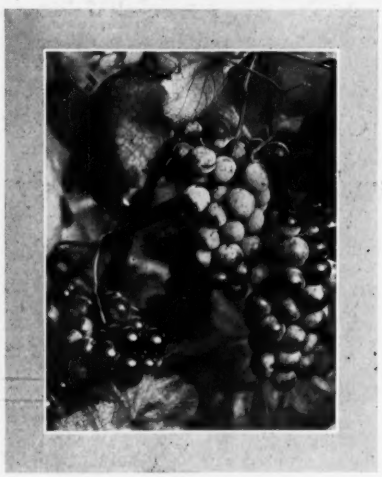
The use of grape juice for the Sacrament gave widespread knowledge of the product and soon doctors found it useful in restoring health to the invalid, the convalescent and the weak; today we know that its therapeutic qualities are due to its mineral salts and acids and its easily digested fruit sugars.

The coming of carbonated water into the drug store, years and years ago, made Welch's grape juice one of possibly the three greatest factors in the development of the soda fountain, which now reaches such proportions as to be referred to as an American institution.

The increased knowledge and understanding of food and its uses has made the modern housewife more choosey—even the average consumer has become so. For proof of which we need go no farther than the soda fountain which is serving pure fruit juices to thousands who formerly, not so "health conscious," had some other preference. This new appreciation for fruits and fruit juices led into a hitherto little developed educational field, so far as grape juice was concerned. The citrus growers had done much, other fruit growers' associations had added to the already popular use of fruits and fruit juices. Fruit juice had moved into a more starry place on the menu. Therefore we set out to tell Mrs. Good Housewife a story different from the specialized use of Welch's for delicious drinks. To change a thought habit is quite a difficult achievement, but many indications point its success. When Welch's first began to be advertised as a "fruit juice for breakfast," many women were heard to say, "Why I never thought of it before," while others replied—"I never dreamed it could be so good for the morning fruit course."

(Below)

The carefully extracted juice of large, fully ripened Concord grapes like these is used in making Welch Grape Juice



Many people prefer the flavor of grape juice in combination with the mineral water, or a carbonated beverage such as ginger ale

To develop a story for a product is a very simple matter unless it is based on truthfulness; then it becomes a task of gigantic proportions—research, investigation, and more research. Several hundreds of persons intimately interested in "the health of people" were interviewed and a most interesting food value was revealed. One which is probably the least understood, yet not the least important—Appetite Stimulus.

Appetite stimulus results, food experts tell us, from a natural hunger, but, aside from that, we eat from habit, and if we eat without appetite our bodies do not get the full benefit from our food. What then gives us appetite? And they say, lovely color, rich fragrance, inviting flavor—these awaken the senses and prepare our digestive system for the food we eat. By stimulating appetite they aid digestion and make possible the better utilization of other food elements.

Dietitians have pointed to the fact that millions of us rise, eat, and go to work without "pep". We lack energy and our breakfasts do not as a rule give it to us as quickly as we need it. Here it was emphasized that grape juice worked to good purpose as a breakfast fruit juice because it furnished fruit sugar, was quickly assimilated, and was an efficient fuel food for it gave energy without exhausting energy. Grape sugar, being already inverted, is sometimes referred to as "predigested sugar".

Grape juice properly prepared is a protective food, that is, it furnishes mineral salts and acids and vitamins. Each of these has a special work to perform. The mineral salts, calcium, potassium and phosphorus are indispensable to build strong bones and teeth. This is a reason for the value of grape juice as a food for children. Vitamin B and a trace of A and C are found in grape juice. It also contains as do only a few foods, the mild laxative properties so necessary to "good health-keeping". Fruit acids are recognized today to have the helpful result of overcoming acidity; thus serving to balance our heavier foods.

In addition to its healthfulness, housewives who have served this juice of ripe grapes for breakfast like the idea, because it is always ready to serve immediately on removal from ice box or cool place, and there is no fuss in its preparation; simply pour into small glasses and serve. It is economical because it

(Continued on page 199)

The Story of Textiles

Supplementary Reading for Clothing Classes in Schools

The Story of Coarse and Fine Threads*

By WARREN P. SEEM

EDITOR'S NOTE:—Since the alert instructor in all branches of household arts is eager to avail herself of helps from the commercial field, it seems likely that this excerpt from Mr. Seem's series in "The Textile World" may offer several constructive suggestions. In spite of the fact that the problem discussed is essentially one of the factory, students in advanced classes may derive considerable help from reading this chapter of the series.

CAN a sample book be drawn from a bale and the evenness of a 10-bale lot be determined from it? The following tests on 190 bales of Grand XX show the evenness value on a sample book as compared with the average on two bales. On the sample book 20 skeins were sampled, and 30,000 yards were tested; on the two bales, 40 skeins were drawn from 20 different books of each bale, and 30,000 yards were tested from each 20 skeins.

No. of bales	Evenness grade by sample book	Evenness grade, average of two bales
70	XX	XX
20	XX	Crack XX
20	Crack XX	XX
30	Crack XX	Crack XX
10	Crack XX	Grand XX
10	Grand XX	Grand XX
10	Grand XX	Grand XX
20	Grand XX	Crack XX

These tests are typical examples of the results obtained on sample books, and show that tests on sample books give very uncertain results.

Application of Gage Test

Extensive researches were made in the laboratory, in throwing, and in the knitting of hosiery and fabrics in the plant of Julius Kayser & Co., to determine the disposition values, operating costs, reliability, and limits of the gage test. A part of these studies are presented here by the courtesy of Julius Kayser & Co.

Twenty skeins of 13/15 denier raw silk were selected from 20 different books of a bale. On the gage reel 30,000 yards were tested according to the standard method.

The silk left over from the test was knitted into tricot fabric—single thread, two beams—and every precaution was taken to get the "quality," or length of loop, uniform.

Classification	Thread defects (Evenness)	Total uneven threads in fabric	Fabric inspection; (No. of fine and coarse streaks)
XXX	10	11	14
Grand XX	20	19	31
Crack XX	30	34	41
XX	40	47	53
X	55	56	79
1	70	90	101
2 over	70	116	191

*Reprinted from "The Textile World".

In the first column are the grade names adopted by the Raw Silk Classification Committee. In the second column are the thread defects given by the same body. In the third column are the number of uneven threads found in the test as close to the grade as we could select. In the fourth column are recorded the number of fine and coarse streaks across the fabric. The fabric was made up of 1,000 threads in the warp. At Fig. 1 are illustrations of samples showing the evenness of fabrics from each grade.

A close study of the samples and the evenness rating showed consistent results and proved that grading evenness by the number of defects and degrees, regardless of length, gives relative results in evenness in tricot fabric.

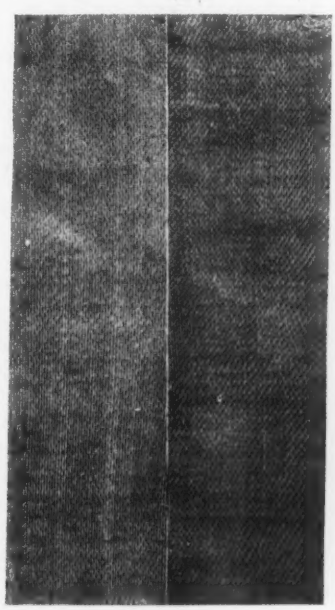


Fig. 2. Two samples of hosiery knit during evenness tests; fabric at left is "first choice"; that on right; "third choice"

Twenty pounds of silk was taken and sorted skein for skein into two lots, thrown into 8-thread and 10-thread hosiery tram, dyed black, and knitted to ingrain stockings. The gage test was made on average size and showed the following evenness defects on 30,000 yards. Size of raw silk was 13/15 denier.

Very fine (under 7 den.)	3 threads
Fine (under 10 den.)	8 threads
Coarse (over 18 den.)	35 threads
Very coarse (over 21 den.)	34 threads
	80 threads

The stockings were all inspected before being seamed in the boot only, and sorted into three classes as follows:

First choice—cloudy, or with slight light and dark streaks.

Second choice—medium light and dark streaks showing.

Third choice—decided light and dark streaks showing.

Fig. 2 shows representative fabrics of both first and third choice.

The inspection of the 8-thread stockings showed:

First choice	28%
Second Choice	47%
Third choice	25%

The inspection of the 10-thread stockings showed:

First choice	47%
Second choice	34%
Third choice	19%

The evening up effect on the 10-thread hosiery showed an increase of 19 per cent in the number of firsts, and a reduction of 6 per cent in the number of thirds. Ninety threads were raveled from one of the third-choice stockings. The normal part weighed 133 deniers and the decided dark streak weighed 153 deniers, or a variation almost equal to that between a 10- and 12-thread, 13/15 raw size.

The following table shows a summary of eight lots all knit from the same 20 skeins tested, dyed black, and knit ingrain, giving the relation of the very coarse threads to the third-choice stockings. (The very coarse ranged from ½ to 50 yards in length.)

Thread	Very coarse in 30,000 yds.	No. of third-choice stockings
6	3	
6	44	39%
6	40	25%
6	28	21%
6	12	16%
8	34	25%
10	34	19%
10	77	41%

Three-thread stockings knit ingrain from the same 20 skeins, when tested for evenness, gave the following results:

	Evenness defects					Hosiery inspection			
Grade bought	Very fine	Fine	Coarse	Very coarse	Even %	Color of	1st class	2nd class	3rd class
Special XX	1	4	20	8	63	Circassian	20%	35%	45%
Special XX	1	2	5	1	91	Black	77%	24%	....
Special XX		2	7	2	86	Silver	60%	33%	7%

As the colors were not the same, a strict relation between the different lots was impossible. The tests show, however—without a question of doubt—that the short, very coarse threads were responsible for the thirds, and that the fine and coarse threads must be limited to under 7 on 30,000 yards, if one hopes to get somewhere near 80 per cent of firsts on hosiery knit ingrain.

The light streaks in stockings were very few, verifying the relation in number of the fine ends to the coarse in the raw silk test, and was not a case of passing the fine in the test.

Six-thread tram was dyed black and knit ingrain. Stockings were knit from the same 20 skeins tested.

Grade bought	Very fine	Fine	Coarse	Very coarse	Evenness %	First choice	Second choice	Third choice
Special XX	..	1	5	2	89	75	25	..
Crack XX	..	3	31	44	29	16	45	39
Italian X. C	1	6	42	40	29	20	55	25
Crack XX	2	4	32	28	37	32	47	21
Italian G. X.	..	4	38	12	56	51	39	16

This table shows that the coarse and very coarse threads still do not even up. A study of the firsts and the percentage of evenness shows a fairly consistent relation between the two; but a close study of all the factors entering into consideration shows that a closer relation can be obtained by penalizing the very coarse by three times instead of by twice, as was done to arrive at the percentage rating.

Other Studies on Evenness

A great variety of other researches were made to study the evenness problem as it applies to raw silk, the using of raw silk in hosiery, and to determine the following information:

First, must a finer gage be used so as to get all the fine and coarse threads in the silk tested to rate evenness, or does the test made at the average size give constant results, a true relation to evenness in the product, and results that can be relied upon in buying and disposing of raw silk? The experiments proved conclusively that evenness tests made on the gage test at average size answer all practical purposes, and that there is a fairly consistent relation between the evenness percentage and the unevenness in hosiery and fabric; but to meet criticism it appears desirable to use the gage 20 per cent finer than average size. The former table must then be increased accordingly.

Second, must the very fine and very coarse threads be penalized alike to get an evenness rating, and to allocate them into a grade that will show comparative evenness results in hosiery and fabric? The results of our researches showed that the very fine and very coarse threads should be penalized by three times, so as to get consistent comparisons and allocate the evenness defects as one number into a grade. Our finding, however, was that a strict relation is impossible, and that one must first group the evenness of the product, then group the evenness defects, and finally compare a group of evenness defects with a group of evenness of the product.

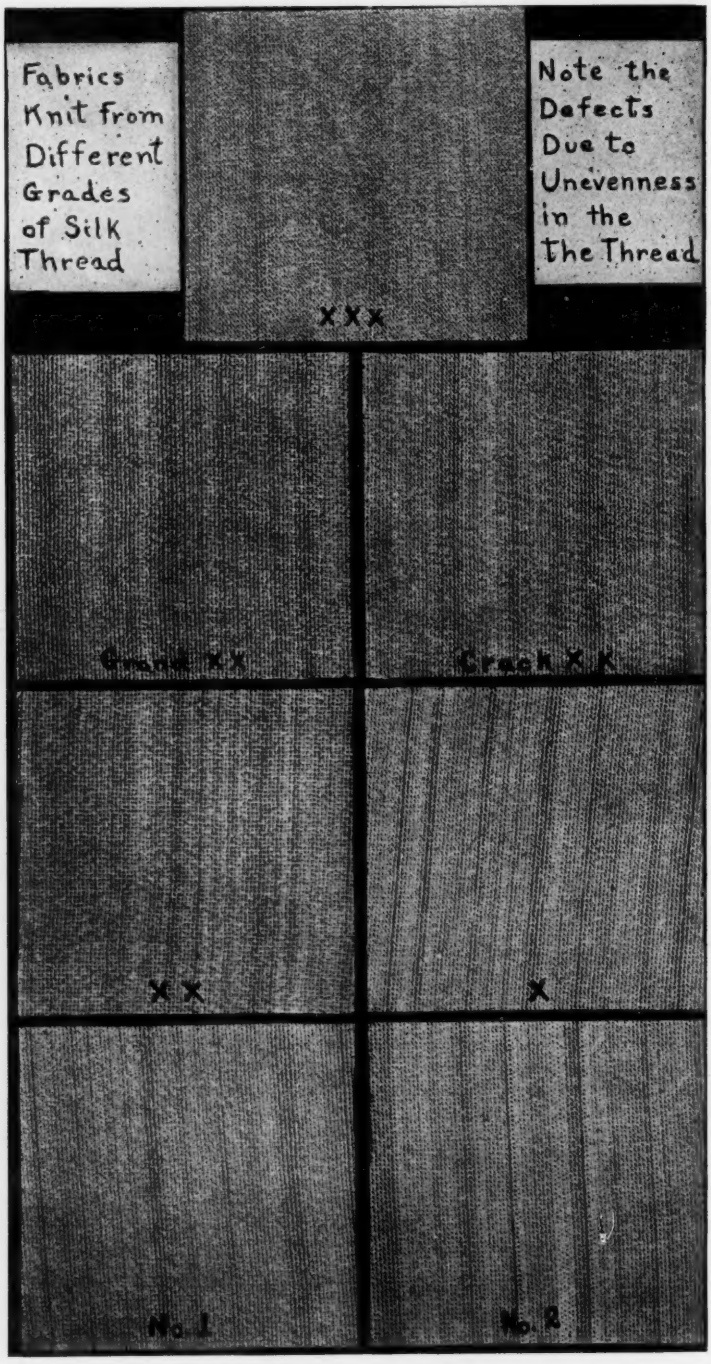


Fig. 1. Fabrics knit from seven grades of silk, showing unevenness defects

Unevenness More Pronounced

Third, is unevenness more pronounced in the product when there are about an equal number of very fine and very coarse threads than when the coarse and very coarse threads predominate? Since the spring of 1922, the number of very fine threads in the 13/15 size has decreased about 50 per cent, but the coarse and very coarse threads have quadrupled in number. The average size, as a result, has increased about 4/10 of a denier. What result has this had

(Continued on Page 197)

Nutrition and Health Education

How One College Trains Elementary School Teachers

By ISABELLA CHILTON WILSON
Director, Home Economics, Marshall College, West Virginia

ISABELLA C. WILSON

EDITOR'S NOTE:—Working out a program that will train teachers to meet the health and nutrition needs of a population so varied in industries as West Virginia is no easy task. The following account tells of the successful way in which Marshall College has solved the problem.

WEST Virginia is a state of varied geographical resources As a result of this graphical resources. tion of mountains and valleys, it is a state of varied industry. The Ohio and Kanawha Valleys and the upland regions are devoted to farming and fruit growing; mountainous section of the state to coal mining, and to the lumber industry; while large industrial centers have developed as a result of the industrial life.

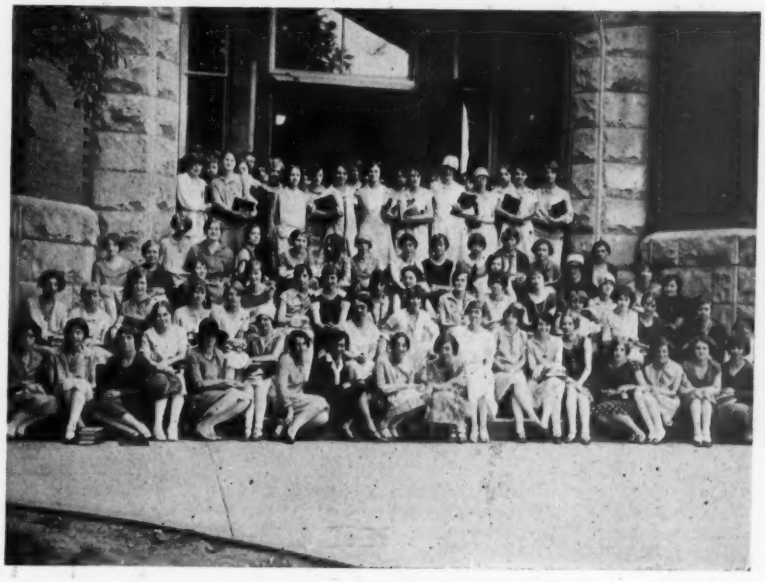
Marshall College is located at Huntington, West Virginia, one of the largest industrial centers of the state. One of the functions of Marshall College is the training of elementary teachers, who will teach in the rural section, the mining villages in the lumber and oil towns, and in the industrial cities of the state. Each type of community has its own food and health problem. The country home has an abundance of food but is lacking in variety of material and in the knowledge of the preparation of one food in many different ways. The need for dental, medical and physical attention is great. The city child has dental, medical and physical attention, but must have the value of proper food, adequate sunlight and fresh air stressed. City people have not yet learned to measure dollars in terms of goods. The city dweller is a consumer, and it is by the wise use of the dollar that his family gains health and happiness. The countryman leaves his home in the country where, as he says, he only makes a bare living, to work in the city for dollars with which he purchases only a bare living.

The problem in the coal or lumber town is still more acute. Food is high, the rural attitude toward money persists; malnutrition is the result. Thirty years ago the primary occupations in West Virginia were rural ones—farming, sheep and cattle raising. Lumber was an important product but many heavily timbered lands had no railroad outlets. The northern end of the state was enjoying an oil and gas boom. Huntington was a town of ten thousand population; Charleston was not much larger; Beckley had one hundred fifty-eight inhabitants; Williamson, Welch, St. Albans, and Bluefield were small rural villages. In the last thirty years Raleigh County has quadrupled its population; McDowell County has nine times as many people, while many counties have doubled their population. In the rural homes of many communities were produced all necessary goods, such as clothing, soap and foods, except flour, salt, sugar and condiments. The people raised their own wheat, and traded one commodity for another. As far back as 1910, ninety-seven per cent of the inhabitants were native born.

"THE LITTLE GIRL WITH DIRTY TEETH"
This is a reproduction of a page in the Health Book, made by one of the students

BUT a change has swept over the state. From living in sparsely located rural sections, the people have swarmed into closely settled mining villages. The conditions of life are entirely different, and one who has lived two miles from a neighbor cannot readily adjust himself to living within sixty feet of one. The density of population changed from thirty-one persons per square mile in 1900 to fifty per square mile in 1910. Gathered together in the mining sections are thousands of rural thinking people who face, not only a new line of work, but a new way of living. The women who formerly produced as well as preserved and prepared the bulk of the food, now buy food which needs preparation only. They who formerly milked the cows and worked the garden now prepare two meals a day and keep a four-or-six-

(Cont. on page 190)



NUTRITION AND HEALTH CLASS
Summer Session of 1927. (95 members) Marshall College, Huntington, West Virginia

Pageant of the Home

Tableaux Show Development of Home from Primitive to Modern Times

By MARY M. BUCKLEY

Supervisor, Domestic Science, Paterson, New Jersey

Chief Characters: The Spirits of the home.

1. Service
2. Opportunity

They bring the story of the past in tableau with recitation and music. The curtain is closed; music of a violin and piano playing rather wild minor music behind. The first tableau is of the past—Girls dressed as Indians represent the following.

1. Fire-maker; fagots, light.
2. Pottery maker; clay and board.
3. Weaver of baskets.
4. Weaver of blankets.
5. Skinning and dressing.
6. Sewing skins, clothing.
7. Shelter.
8. Grinding or crushing.
9. Grain.

Spirit of the Home, **Service,** dressed in flowing white, hair hanging and a gold band around the head like a Greek goddess, slips quietly through the opening in the curtains and with the strains of music playing, begins:

"I am the Spirit of Service. I have been at every hearth since the beginning of life. Wherever women have performed the tasks of home making, I have guided them. They have also been helped by another spirit of the home, **Opportunity.** Come, sister spirit, and help me show this new generation what services of the past we have performed."

Opportunity enters in the same manner as **Service** and says:

"I am the other spirit that has guided the women of the ages. When life seemed dark, my torch of hope led them to grasp new ideas and to make conditions better for their race. It is our duty to show each new generation how the culture and happiness of the race depends on linking up the achievements of the past with the present and the future. **Service,** let us picture some of the early services performed and opportunities grasped by women. Behold!"

Curtain is opened, showing the first tableau. Spirits of Service and Opportunity stand close to curtain, seemingly holding it back. **Service** talks:

"The needs of the human race have always been food, clothing and shelter. These were largely provided by women."

Turns to group and pointing, explains tableaux:

"Man killed and brought in the wild game. Women carried the wood, tended the fire and cooked, rolled the grain for bread; made the pottery needed for preserving and mixing foods. She wove the baskets to carry and keep foods. She sewed the skins for clothing and shelter. She even helped to build the shelter. The women of this generation through service and by grasping opportunities, made life more abundant for the following ones. The women of the primitive and early ages of history knew toil and hardships. They were treated more like animals than human individuals. Here and there throughout the ages a woman became the leader and made it easier for others to do new tasks."

The curtain is closed and then we hear the faint music of violin and piano again:

Spinning Wheel,
Minuet,
Melodies of Colonial Times.

TABLEAU No. 2

Behind the second draperies or curtains is the second tableau, composed of:

1. Spinner.
2. Weaver at a loom.
3. Lace maker.
4. Embroiderer.
5. Preparation of a fireplace.
6. Table.
7. Candle dipping.
8. Lace on pillow.
9. Knitter.
10. Quilting.
11. Paper cutting.
12. Embroidery sample.

Again the curtain is drawn aside and discloses a scene set for a colonial living room. Tableau showing the occupations. Spirit of Service waits a few minutes to let her audience get the import of the tableau, then speaks:

Service speaks:

"The hearth fire of the earlier age is now protected by a house. Within its shelter is carried on all the occupations and industries necessary to the life, comfort and contentment of the family. Spinning and weaving and making of everything used and worn by the family; candles, soap, shoes and furnishing were made under the same roof. But let me show you what they did. Behold!" (Indicates the service or occupation.)

"A fire place filled the rooms one side
With half a cord of wood in—
There warn't no stoves (till comfort died)
To bake ye to a pudding."

1. Candling

"Wife, make thine own candles
Spare, penny to handle,
Provide for thy tallow ere frost cometh in
And make thine own candles ere winter begin."

2. Spinning

"Merrily, cheerily, noisily whirring,
Swing the wheel, spin the reel, while
The foots' stirring;
Sprightly and lightly and airily singing."

3. Wool Spinning

"Spin, thee woolen thread, spin,
The yarn goes out and round
Your varied and graceful posies
To our grandmothers gave grace and dignity.
Turn, oh, wheel, and spin again!"

4. Weaving

"Lo! here 'twixt heaven and earth I swing,
And whilst the shuttle swiftly flies
With cheerful heart I work and sing
And envy none beneath the skies."

5. Sampler

"When I was young and in my prime,
You see how well I spent my time
And by my sampler you may see
What care my parents took of me"

6. Quilting

"Quilt, lady, quilt,
The needle goes out and in,
As your quilting you begin
Keep a cheerful heart within,
Quilt, lady, quilt.
Quilt, lady, quilt."

7. Knitting

"Over one, under one,
Over one again;
Under one, over one,
Then we do the purl.
Hi knitters! ho knitters!
Come and knit with me."

8. Cooking

"Cookery means the knowledge of Medea and of Circe and of Helen and of the Queen of Sheba. It means the knowledge of all herbs and fruits and balms and spices and all that is healing and sweet in the fields and groves and what is savory in meats. It means carefulness and inventiveness and willingness and readiness of appliances. It means the economy of your grandmothers and the Science of the modern chemist; it means much tasting and no wasting; it means English

thoroughness and French art and Arabian hospitality; in fine, it means that you are to be perfectly and always ladies-loaf givers."
6. Paper cutting.

"Thy dexterous scissors ready to produce
The flying squirrel or the long-necked goose,
Or dancing girls with hands together joined,
Or spruce trees with wreaths of roses twined,
The well-dressed dolls whose paper forms displayed,
Thy pen knife's labor and thy pencil's shade."

Curtain closes, music stops. Service continues:

"The powers of observation, art and reasoning developed in this generation produced another generation in which the simple home industries became the big producing and manufacturing plants. Progress has taken the harder industries out of the home and changes have made it possible for women to take up the big public problems of life, but **Opportunity** will show us that there are still services to be rendered and opportunities to be grasped. Let me help you draw the curtains and show this credulous youth." Curtains close again. Opportunity speaks:

"Before any girl leaves our schools for another or for her own home, she has been taught all about cleanliness of home, cookery, sewing and tending the sick. Come, my pictures, help! By my pictures you may see what the younger generation is learning today."

A picture frame draped with green velvet stands ready for each picture as it is called for by Opportunity. **Hospitality** appears. Opportunity speaks:

1. Hospitality
"Let the steaming kettle sing,
Then the pretty caddy bring
And a teapot from Japan."
(Picture): Girl with tray with two cups and saucers, creamer, pitcher, teapot nicely arranged, offering it with a smile.

2. Bread
"Bread is the staff of life, but bread and butter is a gold headed cane."
(Picture): girl with loaf of bread.

3. Cake
"Cake is acceptable at every kind of luncheon; in fact, cakes were invented for that meal, for five o'clock tea, weddings and for school-boys only."
(Picture): Girl with cake.

4. Pie
"Dame, get up and bake your pies,
Bake your pies, bake your pies,
Dame, get up and bake your pies,
Early in the morning."
(Picture): Girl with pie.

5. Pudding
"The daintiest last to make the end most sweet."
(Picture): Girl offering pudding.

6. Tray for invalid
"All that a man hath will he give for his life
Now good digestion wait on appetite and health on both."
(Picture) Girl with a nicely arranged invalid tray.

7. Chicken and vegetables
"Stuff it and roast it and baste it with care,
Daintily then the gravy prepare,
While 'round you the savory odors shall tell,
What 'er is worth doing, is worth doing well."
(Picture): Girl with a tray of well-arranged chicken.

8. Sewing
"A straight seam,
A hem, a tuck,
We learn to make a middy or a dress."

9. Hats
"We make our hats, make our hats,
Save the dollars and gain the skill,
By our velvet and gingham hats,
We soon save the bill."

10. Sewing Machine
"Labor and time
We learn to save
By using this sewing machine."

11. Those ambitious souls that grasp the opportunities of the present may lay the foundation for the professions and occupations of the future and I am going to consult my crystal and picture very quickly for you some of the future services that may be performed by members of the present generation. Let me look I see them clearly. Oh, here I see a

1. Nurse—whose daily life is a blessing to humanity.
2. Dietitian—she tells us what to eat.
3. Visiting nurse—whose daily life is a blessing.
4. Teacher—leader for good.
5. Librarian—She guides our thought.
6. Designer—She tells us what to wear.
7. Architect—she plans our homes and public parks.
8. Dressmaker—she makes us what we appear.
9. Milliner—many a hat spoiled the sermon.
10. Interior decorator—she tells us how to dress our homes.
11. Cook—
"We may live without poetry, music and art,
We may live without conscience and live without heart,
We may live without friends, we may live without books,
But civilized man cannot live without cooks.

12. Home Maker.
Proverbs 31. Music: "Ave Maria."

"A worthy woman who can find?
For her price is far above rubies.
The heart of her husband trusteth in her,
And he shall have no lack of gain.
She doeth him good and not evil
All the days of her life.
She seeketh wool and flax,
And worketh willingly with her hands.
She is like the merchant-ships;
She bringeth her bread from afar.
She riseth also while it is yet night,
And giveth food to her household,
And their task to her maidens.
She considereth a field, and buyeth it;
With the fruit of her hands she planteth a vineyard.
She girdeth her loins with strength.
And maketh strong her arms.
She perceiveth that her merchandise is profitable;
Her lamp goeth not out by night.
She layeth her hands to the distaff.
And her hands hold the spindle.
She stretcheth out her hand to the poor;
Yea, she reacheth forth her hands to the needy;
She is not afraid of the snow for her household;
For all her household are clothed with scarlet.
She maketh for herself carpets of tapestry;
Her clothing is fine linen and purple.
Her husband is known in the gates,
When he sitteth among the elders of the land.
She maketh linen garments and selleth them
And delivereth girdles unto the merchant.
Strength and dignity are her clothing;
And she laugheth at the time to come.
She openeth her mouth with wisdom;
And the law of kindness is on her tongue.
She looketh well to the ways of her household.
And eateth not the bread of idleness.
Her children rise up, and call her blessed;
Her husband also, and he praiseth her, saying:
Many daughters have done worthily,
But thou excells of them all.
Grace is deceitful, and of beauty is vain;
But a woman that feareth Jehovah, she shall be praised.
Give her of the fruit of her hands;
And let her works praise her in the gates.

(The End)

Note—As opportunity calls the vision in the crystal the girls step up to the frame dressed to represent each of the twelve occupations that girls may plan to enter.

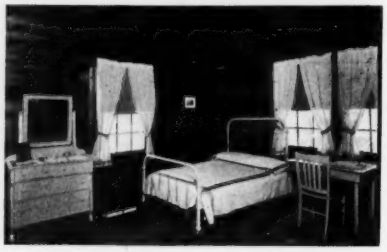
Impressions of Camps in Several Southern States

By CLARA W. HASSLOCK

AS a Field Representative in the Home Economics Department of the Soft Wheat Millers' Association of Nashville, Tennessee, I have been privileged to visit and work with several camps for women and girls during the past summer. These camps have been in the states of Alabama and Arkansas, and have been conducted by the leaders of the girl scouts and home demonstration clubs.

The Home Demonstration Camps have varied in length from two days to a week, while the Girl Scout Camp was continued for nine weeks. All of them have been held in mountainous sections where the cool nights have brought relief from the summer's heat and vigor for the day's work, for these camps were places for work as well as for play.

At these camps, classes have been held in leather work, basketry, tying and dyeing, silver work, household cooking, and camp cooking. Each subject taught gives information and practical work, teaching the use of the hands as well as the head. In the teaching of all these subjects, the use of home products was stressed, as, for instance, the use of the native long-leafed pine in the making of exquisite baskets.



READY FOR INSPECTION
The above is a picture of a bedroom taken at one of the camps in Tuscaloosa, Alabama

In the food classes we stressed home baking, showing its advantages in securing a better product and with much less expense. We found self-rising flour (a pre-leavened soft wheat flour) excellent for outdoor cooking, as well as for home baking, because the flour and leavening are already accurately weighed and thoroughly blended, and this saves the time and trouble of carrying and mixing additional materials.

Another thing in the minds of the leaders was to give the girls and women new ideas of ways of improving and beautifying their home surroundings, and ideals toward which to work. This was beautifully worked out at one camp where a room in the Girls' Dormitory at the school was transformed from a rude, bare, and unattractive place to a bright and cheerful, typical girl's room, and that at very little cost, for the students did all of the work. The walls and woodwork were painted a French gray; the oak stain and varnish of the furniture was removed with lye and it was painted ivory; bright new draperies and curtains were hung at the windows; new bed linen and covers were made, including an attractive boudoir pillow; a cushion was made for the chair, and a small rug of fringed burlap for the floor. Nothing expensive was used in the room, but it certainly was attractive. It will most probably serve as an incentive to keep it clean and attractive, and to improve the rest of the building in keeping with this room. After this experience the girls will see how they can improve their own rooms at home. In fact, many of them said they were going home and make over some of the old furniture there.

These camps, however, were not merely places for work, but for play of all kinds. There were games, singing, stunts, hikes, swimming, canoeing, etc. Play and recreation of this kind not only develop the physical body but refresh the spirit.

Some of these women and girls work very hard in their rural homes and have very little of fun and social life. Many of them have lost the play spirit and forgotten how to laugh and sing; many of them have not been away from home to stay overnight in years. For these the stunts and fun at the camps are a recreational force of great importance, helping them to forget the drudgery of their humdrum lives, and putting new spirit into them.

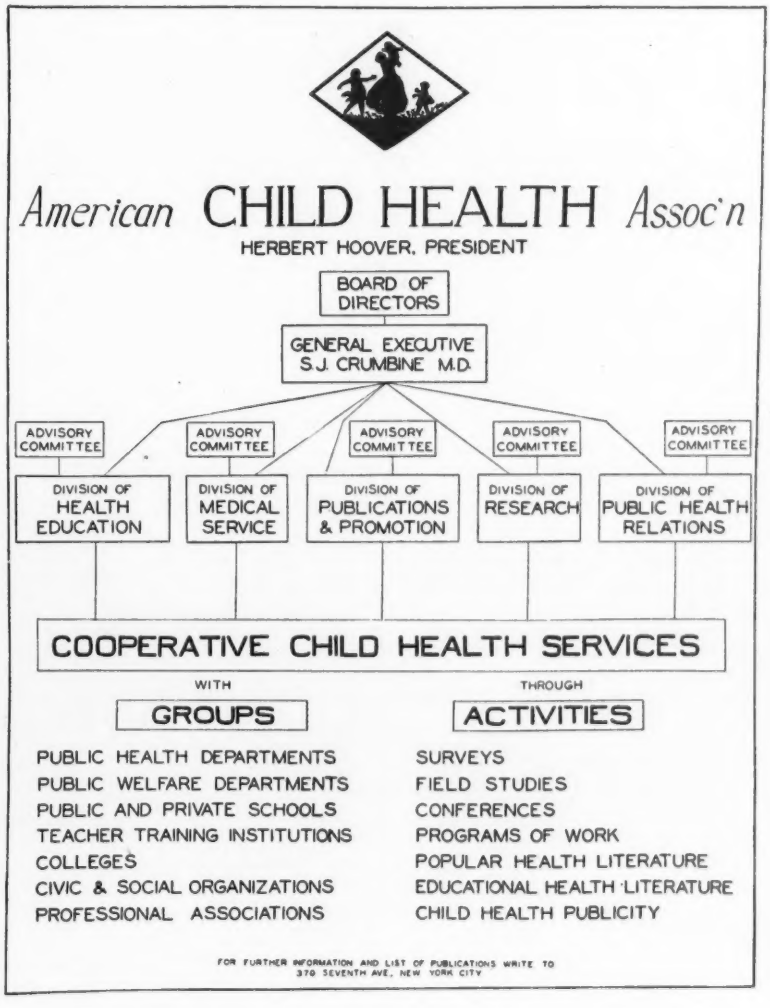
Another thing which is accomplished in camps is the fostering of the co-operative spirit, and of doing things for the good of all concerned. This is especially needed in the case of some children who have been more or less spoiled and selfish, and I have observed this spirit growing in them.

Camps are doing worth-while work in teaching and giving ideals and standards, but the rest, recreation, and enjoyment which they give to the tired body and spirit, will always be their chief reason for being. May they increase in number and usefulness!

CLASS AT WORK
This class is working on baskets, which seems to be very popular among the girls. The camp is in Tuscaloosa, Alabama

BUSY OUT-OF-DOORS
The girls enjoy working twice as much out-of-doors, when the weather permits. This camp is also in Tuscaloosa, Alabama

EDITORIAL



Organizing for Health

TRITE to call attention to the advantages of organization! Short-sighted to neglect its help! If every home economist masters the full significance of this chart, we shall have a new conception of the place of our profession as a cooperating group

Nutrition and Health Education

(Continued from page 185)

room house clean. Any program for the mining section which does not take this into account will be a failure.

The housewife of the mining village must be taught the value of the food dollar, and how to apportion that dollar wisely. She must not expect to buy the fancy grades of meat, canned vegetables and fruit, but instead be willing to buy standard or sub-standard so that her food dollar may also provide milk, eggs, fruits, and greens. To my mind one of the biggest jobs that faces the home economics teacher of West Virginia is training the consumer. West Virginia, as her sister states, found to her dismay that thirty-three per cent of her young men were unfit for war. And as a result of this knowledge health training was incorporated into the curriculum. It was in some measure to meet this problem that a course of Nutrition and Health for the Public School teachers of West Virginia was offered the second semester of the school year 1922-1923 to the teachers of West Virginia, who attended this institution. This course has no prerequisites, and does not allow credit to a home economics student. The time allowance is thirty-six one-hour periods. There is no laboratory work. Rose "Feeding the Family" is used as a text; eighteen references are required, a list of which is found at the close of this paper.

Work in the course is conducted principally by lectures, class discussion, assigned readings, and written work. The course is supplemented by material furnished free of charge by the companies listed at the close of this article. This material is very helpful both to the teachers in making their notebooks and to the pupils in the classroom.

EACH student does three pieces of individual work. She keeps a record of her weight from week to week, she keeps a record of one week's food consumption, and she makes a health notebook, outlining and illustrating the health lessons which are to be taught in her grade. These health notebooks are the most attractive products of the work. They contain clever posters, and original booklets. The students display these and gain much from studying those made by their fellow students. The content of these notebooks is first a discussion of the psychology of the child of that grade; second, an outline of illustrated health lessons for each month of the year; third, a bibliography of references for the teacher, and fourth, a list of supplementary material for the child.

In the four years since the time that Nutrition and Health was included in the Marshall College program, almost five hundred students have been enrolled in the course, and it is to be hoped that the children of West Virginia have profited by this instruction given to their teachers.

The subject matter of the course is divided as follows:

I. 1. The digestive processes.
   2. The energy requirement of the body.
   3. The mineral requirement of the body.
   4. The protein requirement of the body.
   5. The vitamin requirement of the body.

II. 1. Food of the adult.
   2. Food for the infant.
   3. Food for the child.
   4. Food for the aged.

III. 1. The proper division of the food dollar.

IV. 1. The school lunch.

V. 1. Clothing and health.
   2. Shelter and health.
   3. Rest and health, and
   4. Method of teaching health in each grade.

REFERENCES

American Health Ass'n—American Child Health.
Arkansas University—Vitamines, Health and Diet.
Atkinson—The Woman on the Farm.
Bagley—Human Behavior.
Bigelow—Health in Home and Neighborhood.
Bigelow—Health for Every Day.
Baldwin—Growth Children.
Boldnan—Bacterial Food Poisoning.
Brewster—Nutrition of the Household.
Bureau of Educational Experiments—Health.
Cannon—Bodily Changes in Pain, Hunger, Fear.
Carter, Howe and Mason—Dietetics.
by'tn. Hospital.
Conley—Diet.
Elliott—Household Hygiene.
Emerson—Nutrition and Growth of Children.
*Friedenwold and Mason—Diet in Health and Disease.
*Friedenwold and Mason—Dietetics for Nurses.
Hemeway—American Public Health Protection.
Holt—Care and Feeding of Children.
Hunt—Key to Calories.
Jewett—The Body at Work.
Jordan—Principles of Human Nutrition.
Kellogg—Newer Dietetics.
Knight—Diet.
Le Bosquet—Personal Hygiene.
Lusk—Basis of Nutrition.
McCollum—American Home Diet.
McCollum—Diet.
Mendel—Changes in Food Supply and Relation to Health.
Menge—Comparative Anatomy.
Monroe and Stratton—Food Buying and Our Markets.
Nat'l. Child Labor Com.—The American Child.
Norton—Food and Dietetics.
Oppenheim—Development of the Child.
Osborne and Mendel—Feeding Experiments.
O'Shea—The Body in Health.
Pattee—Diet.
Peters—Diet and Health.
Plimmer—Diet.
Ramsey—Care and Feeding of Infants.
Richards—The Art of Right Living.
Richards—Cost of Living Modified by Science.
Rose—Feeding the Family.
Sellards—Principles of Acidosis.
Stern—Food for the Worker.
Tibbles—Dietetics.
Thompson—Eat and Grow Thin.
U. S. Food Administration—Food and the War.
Wheeler—Talks to Nurses.
Willard—Dietetics for High Schools.
Winchell—Food Facts for Every Day.

NUTRITION AND HEALTH MATERIAL

1. Metropolitan Life Insurance Co., Madison Ave., New York City.
2. Lysol (Health Library) Lehn and Fink Product Co., Bloomfield, New Jersey.
3. Pillsbury Flour Mills Co., Minneapolis, Minnesota.
4. Seald Sweet Florida Oranges, Florida Citrus Exchange, Tampa, Florida.
5. Dromedary Dates—Hill Brothers Co., 375 Washington St., New York City.
6. Minute Tapioca Co., Orange, Massachusetts.
7. Walter Balm Cocoa and Chocolate Co., Dorchester, Massachusetts.
8. Fruit Dispatch Co., 17 Battery Place, New York City.
9. Armours Star Ham—Armour and Co., Chicago, Illinois.
10. Sun Maid Raisins, Fresno, California.
11. Better Breakfast—Postum Cereal Co., 342 Madison Ave., New York City.
12. Borden Co., Baby Welfare Department, Lexington Ave., New York City (Borden Building).
13. Libby McNeill and Co., Chicago, Illinois.
14. Royal Baking Powder Co., New York City.
15. Mellins Food, 177 State St., Boston, Mass.
16. Battle Creek Cereal Co., Kellogg Co., Battle Creek, Michigan.
17. Klim-Merrille-Souie and Co., Syracuse, N.Y.
18. Cream of Wheat, Minneapolis, Minnesota.
19. Quaker Oats Co., 17 Battery Place, New York City.
20. Health and Happiness Club—Good Housekeeping Magazine, International Magazine Co., 119 West 40th St., New York City.
21. Health Articles—Delineator, Butterick Bldg. New York City.
22. Sunkist Oranges, Los Angeles, California.
23. Ivory Soap (Excellent Posters) Proctor and Gamble, Cincinnati, Ohio.
24. Wheatena—Wheatenaville, Rahway, N. Y.
25. Junket - Department Ib - Junket Folks, Little Falls, New York.
26. Nujol Co., (Pamphlet on Constipation), 26 Broadway, New York City.
27. Phoenix Cheese, Phoenix Cheese Corporation, Dep't 1320, Plymouth, Wisconsin.
28. Welch Grape Juice Co., Westfield, N. Y.
29. Zonite Products Co., 250 Park Ave., New York City.
30. Juvenille Woods and Co., Fort Wayne, Indiana.
31. Reid, Murdock and Co., (Monarch Co.) Chicago, U. S. A.
32. Colgate Co. (Material on Care of the Teeth) Jersey City, New Jersey.
33. Listerine—Lambert Pharmacal Co., St. Louis U. S. A.
34. Kellog Co., Battle Creek, Michigan.
35. National Dairy Council, Chicago, Illinois.
36. Virginia Health Bulletin, Richmond, Virginia.
37. The Andress Evans Health Series Co., Ginn and Co., New York.
38. Health First Reader, Strobridge Lithographing Co., Cincinnati, Ohio.
39. Housecleaning Hints, Proctor and Gamble, Cincinnati, Ohio.
40. Nutritious Value of Milk, Jefferson, Medical Co., Philadelphia, Pennsylvania.
41. Health and the Daily Life, University of Arkansas.
42. The National Dairy Council, Chicago, Ill.
43. Jefferson Medical Co., Philadelphia, Penna.
44. Department of Interior—Bureau of Education, Washington, District of Columbia.
45. New York County Chapter of the American Red Cross, Madison Ave., New York City.
45. American Child Health Association, New York City, New York, and Washington, District of Columbia.
47. Standard Oil Co., New Jersey.
48. The Welch Grape Juice Co., Department J-32, Westfield, New York.
49. The American National Red Cross, Washtion, Washington, District of Columbia.
50. Life Buoy Health Soap, Lever Brother's Co., Cambridge, Massachusetts.
51. Home Economics Department—Evaporated Milk Association, 231 South La Salle St., Chicago, Illinois.
52. Chicago Dietetics Supply House, Inc., 1750 W. Van Buren St., Chicago, Illinois.
53. West Virginia State Department of Health, Charleston, West Virginia.
54. Massachusetts Department Health, Boston, Massachusetts.
55. State Superintendent of Public Instruction, Raleigh, North Carolina.
56. United States Department of Labor. Women's Bureau, Washington, District of Columbia.
57. The Best Foods Home Economics Service, 80 East 11th St., New York.
58. U. S. Dep't Labor Children Bureau, Washington, D. C.
59. University of Illinois, Urbana. Illinois.
60. T. A. Snyder Preserve Co., Chicago, Ill.
61. Institute of American Meat Packers, 509 South Wabash Ave., Chicago, Illinois.
62. Iowa Tuberculosis Association, 518 Century Bldg. Des Moines, Iowa.
63. Merrill-Palmer School of Home Making, 71 Ferry Ave., East Detroit, Michigan.
64. American Home Economics Association, Baltimore, Maryland.
65. The Libbie Printing Co., 242 Dover St., Boston, Massachusetts.
66. Department of Health. Bridgeport, Conn.
67. Bureau of Educational Equipment, 70 Fifth Avenue, New York.
68. Wright and Potter Printing Co., 32 Derne St., Boston, Massachusetts.
69. Nutrition Clinics for Delicate Children, Boston, Massachusetts.
70. Carnation Milk Product Co., Oconomowac, Wisconsin - Seattle, Washington.

Lunch in a Pleasant Room is an Added Aid to Health

The Supervised Lunch

By MABEL MURRAY

Principal, Public Schools, Salem, Oregon

ONE aim of teachers is to build habits that will insure the child uniform growth along the three channels—mental, moral, and physical, that he may be a well balanced citizen of this great republic.

We must avail ourselves of the many plans, suggestions, and devices for the improvement of the physical condition of our pupils. We must be wide awake and alert to see the little things that may have a retarding influence upon the health of the children under our care. I have in construction a health survey of our school, hoping it will give a clear picture of where we stand physically, and the relation of this condition to our rating in scholarship.

One aid to health has been our supervised lunchroom. We are very fortunate to have in our building a large, well lighted, well ventilated room. A very cheery sunny place, fitted with long oilcloth covered tables, and painted benches. There is also a three burner kerosene stove in the room and a sink where we may wash dishes.

In this school we have pupils coming to us from Chemawa (five miles out of Salem); others who come a distance of one and one-half miles. These children must necessarily bring their lunch. In addition many mothers in this district are employed during the day and their children must spend the noon hour at school.

The lunchroom was originated several years ago by the local P. T. A. in the form of a soup kitchen, offering soup to those wishing to purchase, at five cents a bowl, and serving free soup to those unable to buy. Many mothers who worked we found were obliged to leave home early, the children eating the breakfast prepared and left for them unsupervised. Many times they failed to eat this breakfast, and a bowl of hot soup at the noon hour was greatly needed. We had a case of two brothers who habitually "forgot" to eat breakfast and were sent home regularly at ten A. M. to do so until at last they decided they might as well take time to eat before coming to school.

There seemed to be a desire on the part of those not caring for soup to eat outside in small groups, at the end of the wood pile, under the big tree, almost anywhere rather than in the warm comfortable lunchroom. Even on rainy days they must be gathered up and brought in under protest. Many brought no lunches because they "were not hungry at noon". I am sure the reason they were not hungry was—they were not eating in a comfortable place.

All teachers have urged their pupils to drink milk. I requested every one to eat in the lunchroom and had only one or two objections; one a boy we especially thought should eat in the room refused to go to lunch because "he wasn't hungry". I asked him to go in and sit quietly and rest for fifteen minutes. He did this for two days; on the third day he brought his lunch and has continued to do so.

Pupils are assigned definite places at table, the same as they are in classroom, congenial groups being placed together if possible.

We have a table right near the hall entrance where the child places his lunch when he comes in the morning. At noon they go to the washrooms, then gather in the hall, and at a signal from the supervisor enter the lunch room, take their lunch from the table and pass quietly to their places.

THE rules of the room are very simple, just this, "be ladies, and gentlemen"; there is no restriction placed on quiet talking and visiting. Exchange of lunches, discussions of interesting happenings, formation of sports, teams, etc., are freely indulged in. When a child is through eating he leaves the room without formality, only being sure he leaves his table clean.

At 12:30 two (volunteers) girls wash the tables and arrange the flowers, the janitor sweeps and we are ready for another day.

Our supervised lunch has promoted:

1. Cleanliness—The children visit the washroom before going to eat.

(Continued on page 196)

Free FOR THE ASKING

A HANDBOOK OF REAL INTEREST TO EVERY HOME ECONOMIST

THERE is much of interest to the home economist in this new booklet. Cleansing agents and their uses, softening of hard water, laundering of all sorts of delicate fabrics, removal of stains—these subjects are among those discussed. And there are dozens of practical hints for performing the daily round of washing and cleaning tasks more easily and more efficiently.

Pure, cleansing, mildly antiseptic, deodorizing, always safe—there is perhaps no other single product that has so many really helpful uses in the home as 20 Mule Team Borax. Many of these uses are touched upon in this booklet, which you will find worth a careful reading.

Extra copies for classroom use will gladly be furnished free to home economics teachers. Write for your copy today.

20 MULE TEAM BORAX

PACIFIC COAST BORAX CO.
100 William St., New York, Dept. H
Please send at once a copy of your new booklet, "Better Ways to Wash and Clean."

Name _____

Position _____

Address _____

Housekeepers, Ambassadors of Peace

Foreign Girls Learn American Methods of Home Making

By FLORENCE ALLEN McMAHON
Near East Relief

MARGUERITE CONYNE
Miss Conyne is Director of Homemaking Department, Near East Relief Training School, Syra, Greece

IN Greece, 5,000 miles from the land of the gas stove, the porcelain bath and the automatic refrigerator, girls are learning to keep house according to American methods.

Miss Marguerite Conyne, of Warren, Illinois, is training as homemakers 1,000 girls on the Island of Syra, where Near East maintains a vocational school for Greek and Armenian girls and boys.

A little house has been fitted up as a model home. Here the girls come in relays from the other vocational departments of the school where certain branches of the household arts not intimately concerned with actual home making, such as weaving and sewing, are taught.

The diminutive house has a simple and homely beauty and the girls are taught decorative methods of arrangement which make for good taste in the home. American methods of cooking, canning, dairy work and cleaning are included in the curriculum. Babies are borrowed and installed as members of the little families in order that the future mothers of Greece may learn the proper care of children.

While Miss Conyne presides over this family, each girl takes her turn as hostess, so that she may know how properly to steer the social life of her future household.

As a result of this training, graduates of the Near East Relief schools are so well equipped as home-makers that they are eagerly sought as wives or as high class servants wherever they go out into the world. The following story from one of the orphanages, which is typical, demonstrates their popularity.

A man appeared at the orphanage one day and said he had come to choose a wife. Upon being questioned it was ascertained that he had come a five days' journey. When asked if there were not plenty of nice girls in his village he admitted there were, but, he said, "My friend married one of your girls a year ago. She is a fine housekeeper and a wonderful mother to her little baby. She teaches our village girls many things. I want a wife like that."

This little story illustrates the vital element in Near East Relief's Golden Rule type of philanthropy.

As often as it is practicable it places its graduates in villages where their superior training can serve the community by their example and leadership. It proposes to live on in the hearts of the Near Eastern people by virtue of this principle. The 132,000 children that have passed through its hands since the war are its ambassadors.

To further this work among its remaining 34,000 children the fourth anniversary of Golden Rule Sunday will be observed this year on December 4, which observance President Coolidge hopes "may become increasingly prevalent in America and throughout the World," as he regards it as of "great value in bringing about the settlement of misunderstandings among nations as well as among individuals".

FUTURE HOME-MAKERS
Miss Conyne and a group of her "homemakers" entertain at luncheon Mr. George White, Orphanage Manager and Mr. Barclay Acheson, Director General of Overseas Operations, Near East Relief

A MATTER OF SENSE

KNOX Sparkling Gelatine has become so important as a food for daily use in the home that it is worthy of your careful interest and thought! Remember that Knox Sparkling Gelatine is the purest of gelatine—has been for over forty years. That is why it is so healthful—and so delicious. It contains no flavoring, no coloring, no sweetening. That is why the desserts and salads prepared with it have a home-made appearance and taste! That is why it blends so attractively and zestfully with all kinds of fruits, vegetables, meats, eggs, fish, etc.! Two favorite Knox Gelatine recipes are here presented to you. Other delightful recipes are in the package.

FRUIT FAVORETTE

Soak one-half envelope Knox Sparkling Gelatine in one-half cup cold water ten minutes, and dissolve in one cup hot fruit juice (using any left-over fresh or canned fruit juices). Add one-half cup sugar, one tablespoonful lemon juice and some of the fresh or canned fruit if desired. When mixture begins to set, add white of one egg beaten until light. Beat all well together. Turn into a mold first dipped in cold water, and chill.

HAWAIIAN SALAD

½ envelope Knox Sparkling Gelatine.
1 cup cucumber.
1 cup canned sliced pineapple.
¼ cup cold water
¼ cup sugar
¼ cup boiling water.
¼ cup vinegar.
⅔ cup pineapple syrup.
1 tablespoonful tarragon vinegar, if desired.
1 tablespoonful lemon juice.
Few grains salt.

Pare, chop, and drain cucumber; there should be one cup. Chop and drain pineapple; there should be one cup. Mix cucumber and pineapple, and add gelatine, which has been soaked in cold water and dissolved in boiling water; then add remaining ingredients. Turn into individual molds, first dipped in cold water, and chill. Remove from molds to nest of lettuce leaves. Accompany with mayonnaise dressing.

Mrs. Knox's New Recipe Book—*free!*

Write today—and have Mrs. Knox's latest book in your kitchen. It is her most notable contribution to cookery—it will be your most valuable aid to entertaining and happy family dieting. Charles B. Knox Gelatine Co., 111 Knox Avenue, Johnstown, N. Y.

KNOX *Sparkling* GELATINE

"The Highest Quality for Health"

Any Domestic Science teacher may have sufficient gelatine for her class if she will write on school stationery stating quantity and when needed.

The School Banquet

Opportunity for Social Training, Cooperation and Good Fellowship

By FRANCES D. RADFORD and GRACE R. FINUCANE
Households Arts Dept. Menominee, Mich.

ONE of the definitely established aims of education today is to train the child to become a useful and happy member of his social group. The responsibility for teaching the social graces, once the special province of the home, is becoming more and more a duty of the school. The children from homes of lesser opportunity, who once learned their manners and correct social customs through service in the homes of the well-to-do now have the privilege of learning the social graces along with their "Three R's" in a truly democratic fashion.

The faculty of the Menominee High School has developed the school banquet as one device for social training and for increasing good fellowship throughout the school. These banquets are frequent occurances and are somewhat unusual in that they are given for the students rather than for outside organizations.

The faculty and students have been planning and seeking to improve banquet plans for some ten years and have now formulated a system whereby most of the children who are deserving of recognition are entertained at least once during the year.

There are four annual banquets which are always expected.

As a rule, the first is held at the close of the football season. The first squad, the weight teams, and all the men of the faculty are guests at this dinner for a rousing good time. Early in December the second banquet is held for the squad leaders, or student assistants; this usually includes about one-hundred Juniors and Seniors. Spring brings the Officers' banquet, the largest of the year. Officers of all school organizations from the Senior class president to the smallest seventh grade home room-secretary, are present. They discuss the duties and pleasures of the office-holder and celebrate the closing of the successful year. The last dinner, and the one that is served most elaborately is the Senior banquet. This is held on the Monday of Commencement week and is one of the informal happy times which the Seniors enjoy.

Many other dinners or lunches may be served, such as lunch to the visiting debate teams, "training table" before athletic events, or a dinner for the "M" Club, composed of the letter men of the school and city. The newly organized "Hi-Y" Club has been holding bi-weekly luncheon meetings. At all the dinners and banquets the school board members are welcome guests, and so no special "school board" dinner is held. This is consistent with the ideal of the school; faculty, buildings, and board are all for the service and education of the pupil.

The preparation for the banquet is cooperative, involving various departments of the school. The English and Speech departments plan the programs and the entertainment. They choose a definite theme for the toasts. Perhaps the Squad Leaders have toasts emphasizing the qualities required in their position of leadership, or the officers may use Cooperation and Citizenship as the key-note of the evening. One of the most effective plans for a Squad Leaders' Banquet likened the school to an army. Following is the program:

Manual of Arms- and Legs
Boys' Gym.
Foot Drill—The Awkward Squad
Girls' Gym.
The Daily Mess .....Chemistry
Parade .....Printing
The Bridge Builder
Manual Training Department
The Observation Post....School Paper
The Intelligence Dep't.....Library
Bugle Calls .....Band

The Art Department supplied very realistic decorations, combining the maroon of the school with army khaki, for colorful trimming. Stacked guns of pasteboard guarded the pup tents which partially concealed the nutcups. Khaki programs, printed in maroon, deep red tulips and maroon paper streamers made a very attractive banquet table.

While there are no written laws on "How to behave at a Banquet" the attitude of the student body is all that could be desired. When the students arrive, the girls assemble in Sewing Room A., the boys in B and at the given signal go down to the gymnasium in twos. Here they find their places, sitting in groups as they choose, and at the second signal, all are seated at once. A faculty member or a senior who can be trusted to do the right thing, is placed at each table.

The speaker's table is placed so that all may see and hear without the annoyance of moving chairs. The student toast-master and speakers have been trained by some faculty advisor and have their speeches well memorized. They know that if they speak distinctly so that their hearers can get the point, that they will receive a courteous response. The attitude of the student audience is carried over from the assembly—even the matter of intelligent applause.

The toasts are brief and are usually interspersed with music by the whole group or by individuals. At the Squad Leaders' Banquet each group usually presents a stunt, and the Print Shop vies with the Gym and Science Laboratory for clever and effective entertainment. Dancing sometimes follows the banquets, but it has been found that the evening is more successful if the guests go at the close of an entertaining program.

ALTHOUGH the Art Department provides clever and artistic decorations, the print shop supplies programs or menus, and the English teachers and pupils labor to combine the proper

(Continued on page 196)

Have You A Desk Copy of the "MANUAL of COOKERY"?

Each of the twelve chapters which comprise the Manual of Cookery includes a study of the preparation of a certain type of food, together with a collection of tested recipes. These chapters were originally published in leaflet form, one at a time, by the Procter & Gamble Company. As a matter of convenience we have collected the twelve leaflets and bound them in a stiff covered, loose-leaf binder.

Teachers of cooking classes (either adults or children) will find this bound desk copy extremely useful. We shall be pleased to mail you a copy upon receipt of 25 cents in stamps. The coupon below is provided for your convenience in asking for it. (A set of the 12 leaflets, unbound, will be mailed free.)

PROCTER & GAMBLE, Dept. V-11, Cincinnati, Ohio

I enclose 25 cents in stamps. Please send me a bound desk-copy of the *Manual of Cookery.*

Name .....

Street .....

City ..... State .....

In the year
1737
Benjamin Franklin said:

"The use of money is all the advantage there is in having money."

One of the greatest pleasures which money is capable of producing can be found in Travel. Plan to visit historic Philadelphia, the Shrine of American Liberty, and make the Benjamin Franklin your stopping place. Convenient to *everywhere.*

THE BENJAMIN FRANKLIN
CHESTNUT AT NINTH STREET
PHILADELPHIA
HORACE LELAND WIGGINS
Managing Director

1200-ROOMS Each with Bath

UNITED HOTELS

RATES: 4U pward

MARTHA ADAMS WRITES IMPORTANT BOOKLET—

ONCE more, The Best Foods Library has a contribution to make.

Martha Adams' recent booklet, "The Truth About A Much Discussed Food," published by The Best Foods Economics Service, offers fascinating reading for anyone who is interested in the problems of nutrition.

As its title indicates, this book frankly discusses the much talked of food, Nucoa; explains just what it is, its uses and its dietetic value.

"Nucoa is a delicious nut margarine," says the writer, "made from highly refined cocoanut oil, peanut oil and pasteurized milk, with a dash of salt. It contains no animal fat except that of milk.

"Nucoa is used as a spread for bread and rolls, in cooking and baking, and melted on vegetables by hundreds of thousands of families throughout the country."

Some questions the book discusses are:

Is Nucoa Good for Children?
How Much Does Nucoa Cost?
Is Nucoa Always the Same?
Where Is Nucoa Made?

and many others equally interesting.

If you have not read this little book, you should. It has been and will be widely talked about.

Write today to Martha Adams, The Best Foods Home Economics Service, 297 Fourth Avenue, New York City, and she will send you a copy, free of charge.

Do you know these delicious Best Foods products?

Nucoa Nut Margarine
Best Foods Mayonnaise
Best Foods Thousand Island Dressing
Best Foods Relish Spred
Best Foods (Fanning's) Bread and Butter Pickles
Best Foods Shortning

MARTHA ADAMS
THE BEST FOODS HOME ECONOMICS SERVICE
297 Fourth Avenue, New York City
Kindly send me THE TRUTH ABOUT A MUCH DISCUSSED FOOD.
Name .....
Address .....
City ..... State .....

THE BEST FOODS, INC.
NEW YORK CHICAGO SAN FRANCISCO

The School Banquet

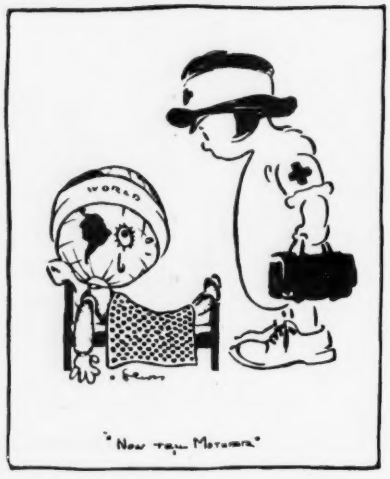
(Continued from page 194)

amount of idealism and humor in the toasts, the Household Arts department considers itself of no less importance. To most young people the food is the party. From the football dinner in the Fall, when "plain food and lots o fit" is demanded, to the festive Senior dinner, the Household Arts department plans the menus, cooks the food and serves the dinner.

Out of its experiences, the faculty of this department has developed a plan which produces the most satisfactory banquet with the minimum of labor. In planning the work for a term, a definite period of time is allowed in each class for banquet preparation. The entire department of some three hundred girls may give its time to banquet preparation if necessary. All classes and teachers in the department have their scheduled tasks. The size of the banquet merely determines whether all of the eighth grade classes, or only one of them, shall set the table. For Junior High School pupils the educational feature is the opportunity to observe the cooking and handling of large quantities of food. Seventh graders cheerfully pare vegetables, chop nuts or count dishes just for the fun of helping. The eighth grade classes apply their regular class work in table arrangement, because their banquet duties always include setting the tables. The actual cooking is planned so that the tasks requiring greater skill can be done by the Sophomore and Senior food classes. Thus they have the opportunity to prepare food in large quantities and to cook foods that are seldom a part of the daily lesson. Some of them become quite expert in cooking the fancier things. For instance, one Senior girl developed such skill in frying timbale cases that she demonstrated to some of the other classes. The Sophomore girls are the waitresses, and receive their instruction in serving as a part of their class work. Practice at one banquet at least, is required of every Sophomore girl in the Household Arts course.

None of the banquet menus are especially elaborate three courses being the rule. The aim in planning is to have foods that are well-liked, easy to serve, and different from that of previous banquets. The cost also limits the menu. Students pay an admission of twenty-five cents and the school budget allows an equal sum to cover the cost of food and any hired labor.

One feature which does away with some of the confusion incident to a banquet is the fact that the faculty has planned these school dinners as a pleasant get-together and not as an opportunity to exhibit feats of culinary skill. If some parts of the menu require much labor, the teachers feel free to order rolls or dessert from local dealers.



With careful planning, so that much of the preparation is completed on the previous day, the day of the banquet is not especially rushed. Only the necessary cooking is done on the day the dinner is to be served and the actual work is over by the close of school. This permits the teachers in the department to have a few minutes of rest as they alternate in watching the food cook. Half an hour before the dinner is to be served, the waitresses appear. They prepare salads, pour water, place nut-cups and menus, and receive last-minute instructions. The members of the Household Arts faculty, sometimes aided by responsible students, serve the food to the waitresses. One member of the faculty supervises the serving in the diningroom. When the last plate of dessert is served, and waitresses, faculty and janitors have eaten, the banquet is ended for the Household Arts department. Competent women are hired to wash the dishes and put the kitchen in order. The "morning after" has only a few clean dishes to put in place.

The success of these banquets would not be possible without the cooperation of other departments with the Household Arts department. By following this plan the numerous banquets and dinners do not prove too great a burden for the teachers and do not unnecessarily exploit the girls. These banquets serve to advertise the department and to keep it constantly before the school.

Most important of all, through these dinners the department is enabled to carry out and put in practice its ideal of service. We plan that the girls shall develop social poise and form a practical conception of joyfully serving others. We feel that a Household Arts department has assumed its rightful position in the school when it gives service commensurate with the strength and ability of its members.

The Supervised Lunch

(Continued from page 191)

2. Increased the average amount of time taken for lunch from four to 15 minutes.

3. Has given opportunity to check up on store lunches. A pupil must ask permission to go to the store, and must show the supervisor his purchase when he returns.

4. It has almost eliminated the buying of cheap candy and prize packages, as candy is eaten only at lunch time in the lunchroom, and children are urged to put their pennies in the school bank (another project that has proved quite worth while in our school).

5. It has increased the milk drinkers. About 85 per cent of our lunchers are habitual milk drinkers.

6. Increased the efficiency of pupils, the milk drinkers being found amongst those who have the highest scholastic standing, and are our best ball players amongst the boys.

7. Has promoted more nourishing lunches for we have urged carrying a pail or basket rather than a paper sack. There can be a greater variety of food and a bottle of milk slips into a basket or pail nicely, but can not be safely carried in a paper bag, also, waste may be avoided as we insist the scraps be taken home.

8. It gives our school grounds a neater appearance, as all apple cores, orange peels, and food wrappers are put in the waste basket, not tucked into some corner waiting for the wind to blow them on the lawn and playground.

From our supervised lunch has grown, the first and second grade morning milk drinkers. We have about 50 pupils in these two grades alone availing themselves of this opportunity to drink milk at the morning recess. The teachers report that it is very little more responsibility, and the response in the increased mental activity repays them bountifully. It is helping to build up our underweight children, and adds another stone to the strong, protective wall (a healthy body) that must be built to safeguard the healthy mind.

The supervised lunch, of itself a small thing perhaps, but as it touches all other school activities, and even the homes from which these pupils come, is an important part of our school day and worth all the thought and time it demands of the supervisor.

PAMPHLETS RECEIVED

"Grain Through the Ages." The Quaker Oats Company, Chicago, Ill.

"What Women Can Do." Georgia State College of Agriculture, Athens, Georgia. Bulletin 296.

"Physical Education." Georgia State College of Agriculture, Athens, Georgia. Bulletin Number 317.

The Story of Coarse and Fine Threads

(Continued from page 184)

on hosiery and knit fabric as far as evenness is concerned, and what has been the effect on the operating cost in throwing and knitting?

Unevenness was found to be more pronounced when the evenness defects were about equally divided between very fine and very coarse threads than when they were mostly above or below the average, or when either side predominated. Further observation showed that as the short lengths of coarse and very coarse threads do not even up, as has been clearly demonstrated by the tests, they have been the cause of a great amount of streaked hosiery in the last four years. The smaller number of very fine threads has reduced the throwing costs, as there were fewer breaks.

The reduction in the very fine threads has not been noticeable in the coarser sizes; in weaving the coarser sizes of single thread in the gum, the coarse and very coarse threads do not show in the fabric. In knitting single thread on the gum, the coarse and very coarse show every unevenness defect.

Fourth, is fabric when made from 40 per cent evenness and sold as a Grand XX any evener than when sold as a Best 1/Ex? Experience shows that silk sold as Grand XX often varies in evenness from Grand XX to Extra, and that the chop and grading of the primary market are therefore not dependable. If the percentage is based on a fixed grouping of a range in number of evenness defects, and the extremes are penalized by a multiple factor of three, then the percentage always represents the same grade of evenness regardless of for what grade the silk is bought.

Fifth, what consideration must one give to uniformity, and how can it be determined? The gage test is generally made on 30,000 yards, with each 10,000 yards scored separately. The degree of uniformity is judged by the range in the number of defects on each 10,000 yards. If one 10,000 yards shows 50 per cent evenness, and another 10,000 yards shows 70 per cent evenness, the unevenness on the fabric is more pronounced because of the greater contrast between the wide streaks of the even and uneven threads than if one 10,000 yards is 50 per cent uneven and the other is 55 per cent uneven. On hosiery where but a small amount of silk is used in one stocking, the number of firsts is governed by the average percentage, provided the very coarse and very fine threads are penalized and the short and long length of evenness defects are counted.

As there is constant and persistent criticism that the gages pass, and do not score, the fine and very fine threads, the light streaks in fabric and hosiery caused by fine and very fine threads were made a subject of long and intense study to determine their relation to the number scored by the gage test so as to definitely decide whether the criticism was sustained.

The study showed that the gage test made on medium grade silk on 30,000 yards repeated itself within half a grade on repeated tests on 20 skeins from 20 books of the same bale when the silk was all reeled at the same filature.

We did not find that the number of very fine, fine, coarse, or very coarse threads are the same. We did find that if one test has many fine and very fine, the other tests also will show the same general condition; and that if the fine and very fine threads predominate in one test, they will also predominate in another. The same holds true regarding the coarse and very coarse threads. In examining the fabric one finds that when the coarse and very coarse predominate in the gage test, then coarse and very coarse streaks predominate in the fabric. The same holds true also of the fine and very fine. While it is possible by the gage test to grade evenness as close as 1 per cent, it is impossible to apply its use in hosiery or fabric in less than 10 per cent, as the elimination of very fine threads in the preliminary departments and the evening-up factor on multiple threads extends the scope of application to a difference of about 100 in the evenness defects in 300,000 yards, or called about 10 per cent.

In other words, one cannot notice a difference, by visual inspection, between fabrics knit from 50 per cent and 55 per cent silks; but when one compares a 50 per cent silk with a 60 per cent silk the difference is noticeable, for the number of evenness defects between 50 and 60 per cent is about 100 defects on 300,000 yards.

Before studying the various methods now used to measure and classify evenness, let us consider the variation that must be tolerated in a test of this kind and judge it by comparison with tolerances found in other raw silk tests. Technically speaking, all tests on raw silk are subject to variations, due to the variation in the different qualities; but, as the scope of application is not a matter of fine application, reasonable variations are negligible.

The international standard test for average size calls for 30 450-meter skeins. Repeated tests on the same bales sometimes give two different sizes. When 200 sizing skeins of 450 meters, or 20 skeins of 4,500 meters are used, then the results are found to be within the same size; yet 30 450-meter sizing skeins are accepted internationally as a standard, and are quite frequently used. Experienced technicians know that the boil-off and conditioning tests are not absolutely repeatable; in practice we accept the results of the tests, when the tests are made the same way, as accurate enough for all practical purposes.

In classifying evenness, we have

(Continued on Page 200)

Making foods more healthful—more easily digestible—is often merely a matter of being sure that you use Royal Baking Powder.

FREE

The Royal Cook Book, containing 350 tested recipes for all kinds of delicious foods, will be sent on request. Mail the coupon below.

THE ROYAL BAKING POWDER CO.
Dept. 21, 101 East 42nd Street, New York

Please send me free copy of the Royal Cook Book.

Name.....

Address.....

City..... State.....

2
Leavening Units

Calumet contains two leavening units; one begins to work when the dough is mixed; the other waits for the heat of the oven—then both units work together. Gives you double value and a double safeguard against failure because it is

DOUBLE ACTING

Makes Baking Easier

Less Than 1c Per Baking

CALUMET

The World's Greatest Baking Powder

Calumet Baking Powder Company
4100 Fillmore Street
Chicago Illinois

Nutrition Work in the Elementary Grades

By IVOE SPAFFORD
Supervisor, Home Economics Education, Alliance School, Jefferson, County, Alabama

THE October visit of the county health nurse to the Alliance School showed 125 underweight children of the 150 weighed. Thirty were 10 per cent or more underweight. That meant that 83 per cent of the elementary children were underweight and 20 per cent were in the danger zone.

The vocational home economics class studying child care had assisted in the weighing. They were much interested in causes, cures, and prevention of such conditions.

The Alliance School is located 20 miles from Bessemer in a hilly section. Pupils from poor farming land and small mining camps are transported from two to ten miles. Vocational home economics was introduced in this school five years ago.

A "Better Foods Campaign" was begun. Conditions were studied. Many children had no lunch. Those provided consisted usually of some of these foods: baked sweet potatoes, boiled and fried eggs, biscuit and meat, and fried pies. Only one bottle of milk was brought. The little money furnished by the parents went for candy and hot dogs at a stand just off the campus.

Information secured from the fourth to sixth grades showed that nearly every home had milk, eggs, and greens. Lack of time in the morning and indifference to the lunch were the commonest reasons given for having none.

Three objectives were set up for the Better Foods Campaign. (1) A lunch including milk and fruit for every child; (2) Fewer underweights; (3) Instruction for the elementary children as to food needs.

The home economics girls were assigned grades. Poems, stories, plays, songs, posters and talks were planned to encourage an interest in bringing the health fairies, Lucky Lunch, Juicy Fruit, and the Milk-Fairy, with them to school every day. Strings of kindergarten beads for the girls and bank accounts of toy money for the boys were started. A wall chart was kept and pay day came once a week.

The lunch period was supervised in every room. Lunches were inspected. Suggestions were made as to food to bring and how to prepare and pack it. A child without a lunch became the exception. Milk came in bottles and fruit jars. The sixth grade opened a fruit store totally eclipsing the candy and hot dog stand. One room sold hot cereal. The home economics department prepared cocoa on cold days.

In May, 152 were weighed. Only 70 or 46 per cent were underweight, and only 14 or 9.2 per cent were in the danger zone. Weight had been gained by 100 of the 152.

This program is far reaching, affecting the future homes of Alliance more than can be shown now. It could be adapted to any school.

MARKETING FOR HEALTH
A Play for Grade Children
Sent on request
Published by
AMERICAN INSTITUTE OF BAKING
1135 Fullerton Ave., Chicago, Ill.

APPROVED HOME MAKERS SERVICE
HOME MAKER H·M STANDARD PRODUCTS TRADE MARK EDUCATIONAL

Practical Helps for
Home Economics Teachers

Consisting of Educational Samples of high grade products and lesson plan suggestions published in our

HOMEMAKERS BULLETIN

sent free to Home Economics teachers. Write to-day and have your name entered on our "Live List" to receive these valuable aids to teaching.

HOME MAKERS EDUCATIONAL SERVICE
Gerald B. Wadsworth, Proprietor
2450 Grove St. Freeport, New York

Every Teacher Should Have This New Food Catalog FREE

TWENTY-FOUR pages listing the new and approved foods used in the routine treatment of diabetes, obesity and other diseases requiring dietary treatment. Quantitative analysis of foods enables you to advise diets with fine accuracy. Variety and suggestive recipes permit making welcome changes. Written in non-technical text that your patient will understand.

Table of Contents

	Page		Page
Food Ingredients	4-11	Insulin	20
Prepared Foods	12-16	Insulin Equipment	21-22
Literature	17	Testing Apparatus	23
Scales	18-19	Food Chart	24

CELLU Products
CHICAGO DIETETIC SUPPLY HOUSE
1750 W. Van Buren St.
CHICAGO
COUPON CUT HERE
Send ____ copies of catalog free.

The Story of Grape Juice

(Continued from Page 182)

is all pure juice and may be diluted if one likes fruit juice that way, as many do. A pint serves 4 to 5, a quart serves 8 to 10, more, of course, if diluted.

Children of all ages enjoy this fruit juice either at breakfast or as a between meal or after school drink. It is especially valuable for children or old people whose digestion is weak and whose appetites are capricious. The malnourished child and those borderline cases which are legion, are helped with fruit juices. As someone has said, "Malnutrition in childhood is not a disease like pneumonia, it is rather a state, a process, manifesting itself not only in underweight, but in many associated functional disorders. Long before there appears a loss of weight, functional disorders may be observed, such as tiredness, headaches, and decreased capacity for work or to enjoy play." Fruit juices (grape juice is an admirable example) are beneficial to infants and growing children. They bring about the better functioning of their little bodies, reduce fatigue and play a remarkable part in overcoming malnutrition. Malnutrition is not confined to children alone so that fruit and fruit juices should get even more consideration than they now receive in the building of adult menus. In invalid feeding, grape juice serves a great purpose since it appeals to the eye and the palate, and is acceptable to the most delicate stomach, as it is, frequently retained when everything else is rejected.

Research on various phases of the nutritive values of grape juice are being conducted at some expense to the Welch Grape Juice Company to develop new knowledge and understanding of the products because it is recognized by them that to live we must serve and serve to live.

Wilbur D. Nesbit wrote a beautiful poem which tells so vividly what the Concord grape is, that it deserves to be quoted in the closing of this article:

"THE CONCORD GRAPE"

I am Sweetness and Sunshine—the Spirit of Summer, the
Fulfillment of the Fall.
The Spring wakens me.
I put forth my Leaves and unfold my Tendrils.
From the Soil I take Elements of Strength and Health.
The Dew of the Morning rests upon my Leaves and Clusters.
The Heat of Noon distills for me the Juice that all Men love.
My clusters wax fat; they catch the Purple of the Autumn Sunset.
I become a Mystery and a Marvel, for no Man may Imitate me.
There is no Depth of Wisdom nor Height of Inspiration, nor is there any Avenue of Science which can achieve what Nature Achieves in Me.

The 2 favorite Coconut recipes of a famous testing kitchen

TWO well-known home economics experts, Mrs. M. A. Sharkey and Miss Melinda E. Talcott, of the Modern Methods Kitchen in Boston, recently spent two months experimenting with coconut.

They tried out other brands of prepared coconut and the hand-grated meat of fresh coconuts against Baker's new moist canned coconut, Southern-Style.

This is the report they gave us:

"In comparison, we found other brands dry and tasteless. They were simply not in the same class—either in flavor or in texture, and the results in cake, pie and other coconut dishes were not nearly so desirable.

"We don't know how anybody could ever use anything but Baker's Canned Coconut, Southern-Style, after once having tried it."

You will want to try the new canned coconut right away in these two delicious new recipes that Mrs. Sharkey and Miss Talcott have originated.

And then you will want to have the new Baker Coconut Recipe Calendar which we shall be glad to send to you free.

Butterscotch Coconut Cake

(Filling) Blend thoroughly ⅔ cup light brown sugar with 4 level tablespoons flour, well-beaten yolks of 3 eggs and 2 tablespoons butter; place in double boiler; add slowly 1 cup scalded milk and cook 7 to 10 minutes stirring constantly; when cool add 1 teaspoon vanilla, 1 tablespoon cream, and ½ can of Baker's coconut.

(Icing) Cook together 1¼ cup brown sugar, ¼ cup water, 2 tablespoons butter, 1 teaspoon vanilla until it forms a soft ball when dropped in water. Beat until it is of right consistency to spread over top and sides of cake and cover with Baker's Coconut, Southern-Style.

Apple Coconut Pie

2 cups unsweetened apple sauce; ¾ to 1 cup sugar according to tartness of apples; 1 tablespoon lemon juice, grated rind of 1 lemon; 3 egg yolks, lightly beaten; ½ can Baker's Coconut Southern-Style.

Pour into pastry shell and bake in a moderate oven from 30 to 35 minutes. When cool, cover with a meringue. Sprinkle thickly with remainder of can of Baker's Coconut and brown slightly.

Free to teachers! Fill out the coupon, mail it to the Franklin Baker Company and you will receive a sufficient supply for a class lesson—*free.*

FRANKLIN BAKER CO., Dept. I 8 Hoboken, N. J.

Name .....

School .....

Address .....

Number of students in Domestic Science Laboratory Courses .....

In connection with what laboratory lesson do you plan to use the coconut.

.....

.....

Premium Shred *— The best of dried coconut in an improved, stay-fresh package.*

BAKER'S

COCONUT

These Globules of mine are filled with the Honey-due of Summer and the Ripe Goodness of the Autumn.

Yet they are filled through the Channels of my Vine,

And no Man knows How or When or Why.

From Earth and Air and Sunshine I receive the Elements which Nature blends into my October perfection.

When my Leaves are Gold and Brown and my Clusters are at their fullest,

Then I give my Choicest and Best to Those who know,

Then are my Fairest and Richest Clusters taken,

And from their very Hearts is secured the Purity and Excellence which Nature has given them.

And of it is made the Beverage which is for the Good Cheer and Good Health and Good Living of Children and Women and Men.

The Ultimate Home Economist

(Continued from page 180)

food cooked outside the home than did a generation ago.

There is an increasing tendency to seek all pleasure outside home walls, and less cooperation between parents and children in finding comfort and entertainment at home. Since food is one of the greatest sources of pleasure, as we grow less dependent on the home table this means the cutting of another home tie. One cannot see the crowds eating outside the home in all cities and many smaller towns without feeling that we have lost something from the home life.

Having had an opportunity to see conditions of daily home life in nearly every state in our land, and having taught cookery under all sorts of conditions, to pupils of all ages in public and private schools and colleges, as well as under various extension agencies, I am convinced that we are not yet doing enough for those who would enjoy cookery as an avocation.

The Story of Coarse and Fine Threads

(Continued from Page 197)

aimed to keep within a variation of half a grade, or about 3 per cent. In actual practice we find that repeated tests on the same bale generally are within a range of half a grade when using 30,000 yards on medium grades of evenness.

On the higher grades we find it necessary to use from 40,000 to 60,000 yards to get results within the range specified.

The BEST COOKS *use*
Aluminum
ALUMINUM WARES ASSOCIATION
Publicity Division, 844 Rush Street, Chicago

Yes

They do Like
The Home Economist

We have had numerous compliments about the change of Food & Health Education into The Home Economist. We are pleased because we are striving to bring you greater service.

So write us also. Tell us what you find in it of special value, and what you want that we have not yet given you.

THE HOME ECONOMIST
468 Fourth Avenue New York City

Statement of the ownership, management, circulation, etc., required by the Act of Congress of August 24, 1912, of The Home Economist, published monthly at Floral Park, N. Y., for October 1, 1927.

State of New York, County of New York, ss.:

Before me, a Notary Public in and for the State and county aforesaid, personally appeared J. T. Emery, who, having been duly sworn according to law, deposes and says that he is the Business Manager of The Home Economist, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912 embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, and business managers are:

Publisher, The American Food Journal, Inc., 468 Fourth Ave., New York City.

Editor, Winifred Stuart Gibbs, 468 Fourth Ave., New York City.

Managing Editor, Winifred Stuart Gibbs, 468 Fourth Ave., New York City.

Business Manager, J. T. Emery, 468 Fourth Ave., New York City.

2. That the owners are:

The American Food Journal, Inc., 468 Fourth Ave., New York City.

J. T. Emery, 468 Fourth Ave., New York City.

Karl M. Mann, 468 Fourth Ave., New York City.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is.....(This information is required from daily publications only).

J. T. EMERY.

Sworn to and subscribed before me this 30th day of Sept. 1927.

ETHEL M. GOODWIN.

Form 3526—Ed. 1924 Notary Public, New York County.

(My commission expires March 30, 1928.)